

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

February
1917

In This Issue:

Better Stores for
Dealers,—
with a New
Department

How a Bank
Finances Wiring
Contracts,—and
Thirty Other
Housewiring Ideas

Getting at the
Dealer's "Net"

A "Brass Tack"
Merchandising
Story

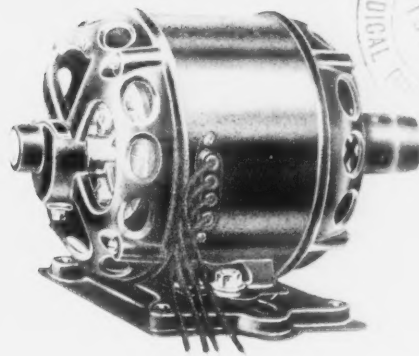
Estimating a
Big Residence
Wiring Job

Hunches on Selling
Vacuum Cleaners

"Dollar Ideas,"
Methods and Plans for
Dealer Contractor
Jobber Salesman
Manufacturer

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CONTENTS

FEBRUARY 1917

THE NEW SPIRIT IN MERCHANDISING—An Editorial	50
YOUR PLANS FOR WIRE-YOUR-HOME-TIME—APRIL 1 TO MAY 15	54
THE BANK AS THE CONTRACTOR'S ALLY	52
The Plan by Which a Trust Company Provides Cleveland Electrical Contractors with Working Capital to Wire Already-Built Houses.	
TAKING AN INVENTORY OF WEAKNESS	56
BY FRANK B. RAE, JR.	
TO CASH IN ON THE "KITCHEN MOVIES"	58
BY CLARA H. ZILLESSEN	
How You Can Use the Stories in the Women's Magazines to Help You Boost Appliance Sales.	
GETTING AT "THE NET"	60
The Dealer Who Wants to Make Sound Profits Must Know His Costs Just as He Knows His Gross Sales.	
THE WAY OF THE VACUUM CLEANER	62
BY W. E. BAYARD	
CHOOSING FIXTURES FOR YOUR RETAIL STORE	64
How the Standard Equipment on the Market Can Be Adapted to the Special Needs of the Shop That Sells Electrical Appliances and Supplies.	
REMODELING A SMALL STORE	66
STORE EQUIPMENT AND STORE METHODS	69
HOW JOLIET SCHOOL CHILDREN RAISED FUNDS FOR AN ELECTRIC FLAG	72
MAKING THE LAYOUT MATCH THE HOUSE	73
SIX CAPITAL HUNCHES FROM A SMALL-TOWN WIRING CAMPAIGN	75
EDITORIALS	76
IDEAS FOR THE MAN WHO SELLS	77
HINTS FOR THE CONTRACTOR	80
"HOW IT WORKS"	82
QUESTIONS AND ANSWERS	83
NEW MERCHANDISE TO SELL AND WHERE TO BUY IT	84
GOSSIP OF THE TRADE	92

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Electrical Merchandising

THE MONTHLY MAGAZINE OF THE ELECTRICAL TRADE

Readers of ELECTRICAL MERCHANDISING who wish to keep in touch with the trade, commercial and engineering news of the industry, advances in electrical engineering and operating practice, and matters of central-station policy and sales management, are referred to the weekly ELECTRICAL WORLD.

Are You Satisfied with Your Store?

THE truth is sometimes painful. One of the painful truths about the electrical industry is this: Our stores are *not* as a class either well arranged or well equipped. Some almost merit the name of junk shops; others (operated by affluent central stations) are veritable salons; few indeed are clean-cut, businesslike stores such as dry goods merchants and clothiers conduct.



It is to co-operate in improving the arrangement and equipment of electric shops that our new department, "Store Equipment and Store Methods," has been started in this issue. And in starting it, we have been urged by letters such as the following which was received from an electrical merchant in the Southwest:

"If you can give me any information on starting up an up-to-date shop I will appreciate it. If possible, please send me the names of firms manufacturing showcases, etc."

This request is typical of many we have received. The electrical merchant wants to know more about counters, show cases, window display material, shelving and the hundred-and-one items that constitute store equipment. He realizes that merchants in other lines give these subjects keen study, and that they are supplied with the information by their trade papers.



ELECTRICAL MERCHANDISING will be such a source of information for the electrical merchant. The new department is in competent hands. It will be a regular feature of the magazine. Those who are ambitious to extract the last penny of profit from their merchandising effort will find it of great practical value.

Lighting Sales and Lighting Methods

A BIG share of the daily business of most of the readers of ELECTRICAL MERCHANDISING has to do with lighting in some way or other. To extend the usefulness of the material which we have been printing each month on lighting sales and lighting methods, we are arranging to group together, beginning with the March number, the lighting articles and items in a new department for the man who sells or installs lighting equipment. In furthering this editorial policy the *Lighting Journal* has been acquired by the publishers of ELECTRICAL MERCHANDISING and ELECTRICAL WORLD, and will be merged with the McGraw electrical publications (see four-page announcement elsewhere in this issue), Mr. Norman Macbeth, editor of the *Lighting Journal*, becoming associated with us as a contributor and specialist on lighting matters. The new department will tell "how to sell" lamps, fixtures and accessories, and will interpret advances in the lighting art for the immediate benefit of the contractor, lighting salesman, fixture manufacturer and dealer.

The New Spirit In Merchandising

—AN EDITORIAL



TO-DAY the customer, the final consumer of electrical equipment, is the least understood man in the electrical business. We all know each other. Sometimes we know too much about each other. We spend too much time discussing our problems as manufacturers, as engineers, as jobbers, as contractors and dealers, as central stations, but the man for whom we are all working, the man whom we can visualize as the common denominator of all our problems—the customer—we think too little about.

The retail distributing of electrical goods outside the technical and applied engineering fields is the weakest side of the industry. There is an historical reason for this. The electrical industry has been built backwards. We started as a science. The names of electrical units are the names of scientists. We have specialized in lighting, in railway, in power, in telephony, in government and in public service. We have only lately begun to realize that we must also specialize in merchandising.

No one to-day can answer the question who is to be the electrical merchant of the future. The whole answer is in process of forming. No one has found the answer. ELECTRICAL MERCHANDISING wants to see the electrical men swing the electrical trade, but business goes to the men who get after it, and merely stating that it ought to go to the electrical trade won't make it.

We believe that the merchandising side of the electrical industry can be developed in the same

way that the merchandising side of any industry is developed.

This new spirit of merchandising in the industry can be summed up in five words—Knowing More and Guessing Less.

Buyers are wiser. This does not mean that they were fooled into taking what they didn't want before, but it does mean that they in their turn have been analyzing their business and know more exactly what they want.

SO MERCHANDISING to-day means not taking orders, but selling goods. We must first know who our buyers are and next what they really want.

An intelligent analysis of a business by lines often points out unsuspected markets for goods. A manufacturer of fittings with whom we recently talked discovered that the industrial-plant field was one that he had almost completely overlooked. He knew that mines and factories and big mills bought his product, but he didn't realize how much, nor did he realize that jails, hospitals and other isolated plants purchased and could be made to use a much larger percentage of his goods.

A second stage in the development of merchandising is supplying the customers' wants at a profit to yourself. Here again analysis on the new basis is showing some weakness of the general idea of carrying a line complete in every detail when three or four items in that line are the real sellers that

have to carry the burden of loss on all the other goods.

Bookkeeping is an uninteresting subject, but until the men who are distributing electrical goods look at their bookkeeping as prophecy instead of history, a lot of money will be lost every year in handling lines at no profit. For policy reasons it may sometimes be necessary to handle non-profit lines, but there is too much assumption that it is good policy to carry lines at a loss and not enough real knowledge of what it costs to handle different lines and items.

One big thing that finding what it costs to handle different lines establishes is the waste effort and waste clerk hire in routing the handling of small orders. On a jobber's desk not long ago we saw a pile of papers 6 in. high. That pile of papers concerned a consignment of goods which included an item on pliers amounting to something like \$10. The pliers had been lost, and it was taking a good many times the \$10 in time to straighten out the red tape in requisitions and forms to find where the loss had taken place.

THE methods of mail order houses have been studied and the methods they use to handle a multitude of orders are being adapted to manufacturing establishments. One mail-order retail jobber in Chicago has a system of credits and orders for handling small items from country storekeepers that is little short of marvelous for eliminating routine and red tape and at the same time insuring accuracy. The two main features are a grouping of stock in a special way and a card system of credits, and also a plan of keeping track of the basket in which the order is assembled

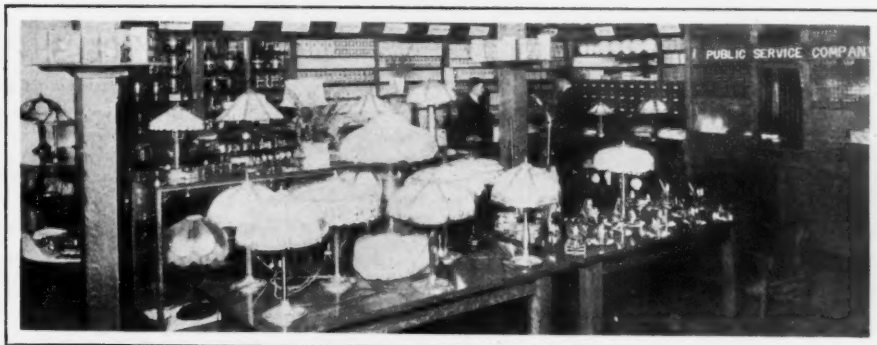
rather than the detail items of the order. Good work is also being done in some of the associations to emphasize the value of better cost finding methods to their members.

The third factor in the new spirit in merchandising is to be listed under the head Creating Demand. Merchandising is not simply waiting for orders to come in, or sending a man around who sticks his head in the door and says, "Don't you want to buy something to-day?" What the new merchandising demands, comes from showing customers how you can fill their needs after you have shown them new ways to use old products, or ways of adapting new products to their old needs.

HERE is the big need in electrical merchandising to-day. Here is where we have the opportunity to analyze our customers' wants and to supply what they want. We need to know who our buyers are and that we want to supply what these buyers want at a profit, but the men who deserve the title of merchandisers are those who take the third step and go out and develop business where none existed before.

To this end leading manufacturers to-day are helping the men in between them and the final consumer by advertising to the trade, by dealer helps and by specialized sales effort, which help create demand.

But this is only part of the story. No amount of advertising to the consumer will get business unless the dealer has a stock of goods. No amount of general advertising will help draw customers to stores unless the store itself, its show windows and its clerks, and its whole spirit are in the same spirit as the advertising.



THE BANK AS THE CONTRACTOR'S ALLY

The Plan by Which a Trust Company Provides Cleveland Electrical Contractors with Working Capital to Wire Already-Built Houses

THROUGH a plan of financing contracts for wiring already-built houses, made available by one of Cleveland's largest banks, the electrical contractors of that city are now able to use the bank's financial facilities much as any other business men would, to obtain working capital for carrying on their business.

The contractor solicits the wiring job on a flat-price schedule agreed to with the Cleveland Electric Illuminating Company, which pays him a commission for making the sale. The wiring contract form, in addition to carrying on one side an agreement between the house owner and the contractor, also carries on the reverse a simple assignment clause on which the contractor transfers all money due under the contract to the local bank and in which the house owner agrees to make payment to the local bank.

BANK LOANS 50 PER CENT ON CONTRACTS

When the contract is signed the contractor passes it into the company's office, which certifies to the bank when the work is finished and the electric service has been installed. The contractor can then borrow from the bank 50 per cent of the face value of the contract, paying interest at the rate of 6 per cent per annum.

The bank makes its collections from the householder in ten monthly installments. As these monthly collections are received at the bank, two-thirds of

the amount is used to reduce the face of the contractor's note, and the other one-third is credited directly to the contractor's deposit account. For this collection service, the bank charges a fee of 5 per cent.

CONTRACTOR SAVES IN MANY WAYS

The plan provides the contractor with working capital, gives him an opportunity to expand his business, permits him to make a saving by taking advantage of jobber's cash discount offers, and relieves him of the necessity of keeping cash books, since the bank provides him with detail statements of his operations at regular intervals.

From the bank's standpoint, there are also many distinct advantages in this housewiring plan. First of all, the bank is afforded a new outlet for investing its funds in a very secure proposition, for the proportion of uncollectible housewiring accounts in Cleveland has from actual experience been only a fraction of 1 per cent. Second, the plan puts the bank in touch with a new set of property owners, giving it an opportunity to make them its patrons. Third, the plan assures the bank a very good proportion of the business of the electrical interests of the city.

The introduction of the bank into the housewiring situation also relieves the electric-lighting company of securing money to finance local wiring contracts, while at the same time assuring that unlimited funds for that purpose will always be available. The scheme also spares the electric com-

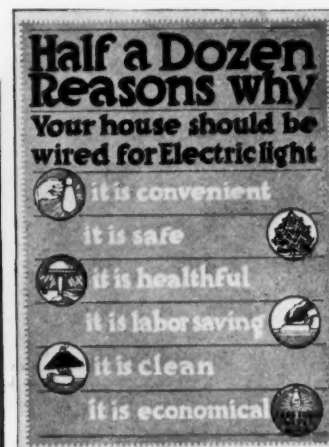
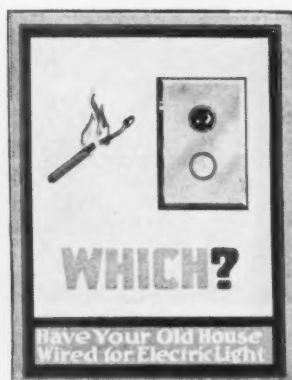
pany the duty of collecting housewiring installments.

More than 2000 contracts were handled by the Cleveland bank referred to during the first six-month period that the plan was in effect (July to December, 1916). At the end of that period the bank was carrying 1100 contracts. Its outstanding loans to wiring contractors, according to an estimate furnished by M. E. Turner, sales manager of the Cleveland Electric Illuminating Company and the originator of the plan, in a statement to the Society for Electrical Development, Inc., aggregated \$50,000.

And of the 500 contracts for wiring old houses now being closed at Cleveland each month, an average of 400 are taken on the installment plan and are financed by the bank.

OUTGROWTH OF INSTALLMENT PLAN

The present scheme of enlisting the bank to finance the wiring of already-built houses at Cleveland is the outgrowth of a partial-payment plan, with commissions for contractors who wire old houses, under which the Cleveland contractors and central station companies have been co-operating for several years. In 1915, 4500 houses were wired under this schedule, and during 1916, some 6200 were connected up. Prior to June, 1916, however, the collection payments were carried by the contractors themselves, except in the case where the customer paid cash and received a discount from the



Four pieces of the striking house-wiring literature issued by Cleveland Illuminating Company in campaigns with contractors

AUD FORM 12		WIRING CONTRACTOR'S COMMISSION REPORT		500 10-1-16	
THE GUARDIAN SAVINGS AND TRUST COMPANY					
THE CLEVELAND ELECTRIC ILLUMINATING CO. 520 Illuminating Bldg., City,			CLEVELAND, O.		
Gentlemen:-					
Payment of the third monthly installment has been made on the following contracts, all of which were entered into subsequent to June 10, 1916.					
Very truly yours,					
NAME OF WIRING CONTRACTOR			THE GUARDIAN SAVINGS AND TRUST COMPANY		
BY _____					
CONTRACT NO.		CONSUMER'S NAME AND ADDRESS			

Form of commission report submitted by the bank

schedule of flat prices per outlet offered by the Illuminating Company. These contracts were received from about 140 contractors large and small. Some were contractors in name only, and, while signing contracts on the Illuminating Company schedule, sometimes cut prices under outside agreements with customers. The result was that the real wiring contractors, having regular overhead expenses, were getting to the point where they did not very much care to continue this class of work, because of the reduced profit involved.

PUTTING THE BANK PLAN INTO EFFECT

Notice was therefore sent to the above 140 contractors that no commissions would be paid for wiring contracts obtained after June 10, except such as were taken under the schedule, and were delivered to the Guardian Savings & Trust Company, and upon which payment had been made for at least three consecutive months.

The immediate result of this letter was a falling off of the number of houses contracted for, but this had been anticipated. The hope was that the number would return to normal level and that the rate of gain would exceed even its former value. The number of contractors who continued to work on this class of business immediately reduced itself to about ten, but by the end of the year had risen to thirty, including most all of the representative wiring concerns of the city.

Since July there has been little, if any, price cutting, so that all those who remained in the business there have been realizing proper profit, and

the installment plan, which had fallen into disuse by reason of the cash basis, has again been put into effect.

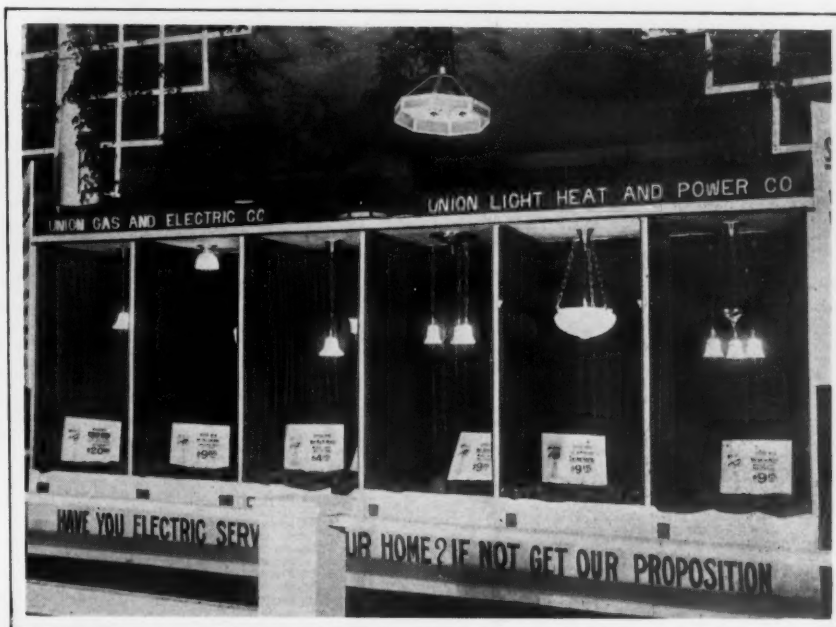
Most of the representative contractors at Cleveland are taking advantage of the bank-financing plan, and inquiry among the contractors and local public indicates that the scheme has proved most popular to all of the interests concerned. It has placed the wiring of houses on a frank and open basis of straight business and both simplified the problems of financing and removed all sources of embarrassment for the householder of scant means who wishes to avail himself of the easy-payment opportunity yet hesitates to enter into such an arrangement with the contractor or lighting company.

Selling House Wiring Over the Counter

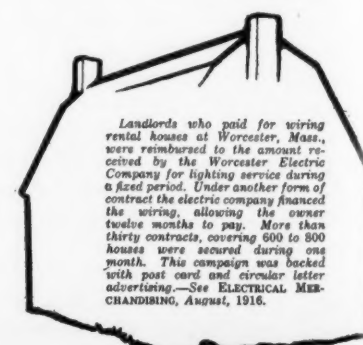
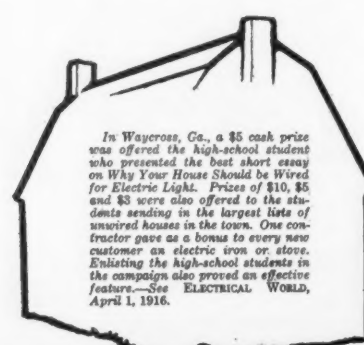
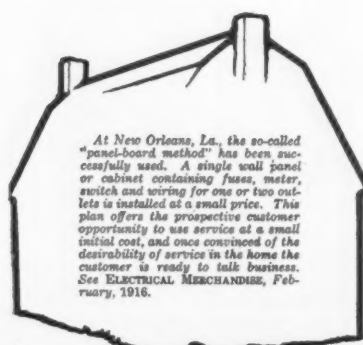
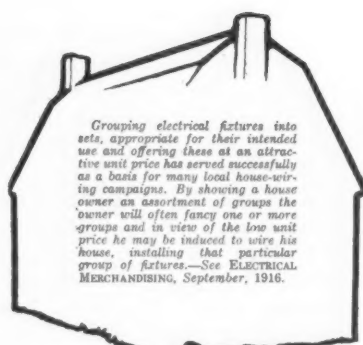
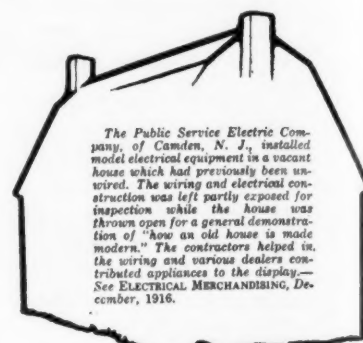
During the recent electric show at Cincinnati the new-business department of the Union Gas & Electric Company experimented with a plan for selling house-wiring over the counter. It was worked like this:

The electrical contractors and the company, working together, got up a schedule of prices for wiring an average kitchen, an average dining-room, an average bathroom, an average living room, and an average bedroom. The prices were as follows: Kitchen, \$20.85; dining room, \$9.15; bathroom, \$4.15; living room, \$9.15; and bedroom, \$9.85. Then at the electric show a booth was constructed like the one illustrated herewith. Salesmen were stationed at the booth to talk with people who were interested in electric service.

For the prospective customer with a five-room house the salesman could tell the cost of wiring merely from the description of it. If the prospective customer said, "The house has a kitchen, dining room, living room, bathroom and bedroom," the salesman could show the fixtures and the placards, add the prices noted on the cards and quote a price without even having seen the house. If the prospective customer was pleased with the offer the contract could be signed instantly, and arrangements could be made for extending the payments over a period of months.



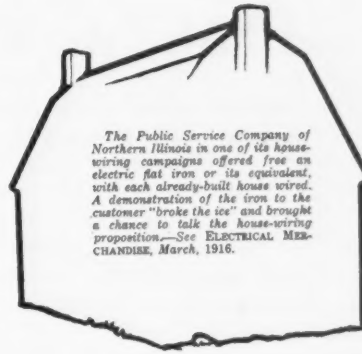
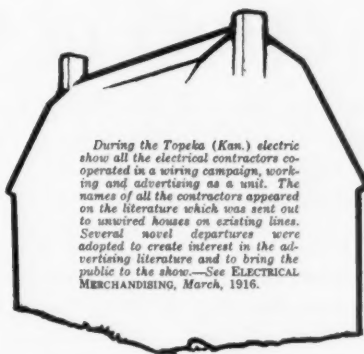
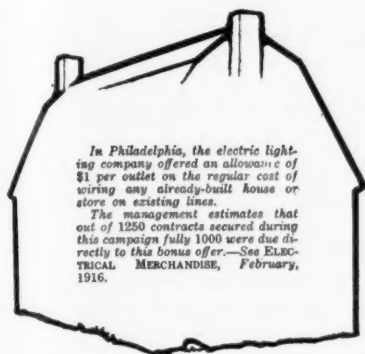
How the different house-wiring and fixture offers were featured at Cincinnati show



Your Plans for "Wire-Your-

NO MAN need hesitate to take a hand in the big national "Wire-Your-Home-Time" campaign that begins on April 1 for fear he cannot carry through a local housewiring project profitably. There is as much variety in wiring campaign plans as there is diversity in those celebrated "local conditions" that seem to stand between so many electrical men and their prosperity. Just read the few suggestions that are offered on this page, picked from the hundreds that have appeared in ELECTRICAL MERCHANDISING and ELECTRICAL WORLD, and you will probably find right here some idea that fits your case—and there are many more available to you.

This Wire-Your-Home-Time campaign is the logical outgrowth of the annual spring house-wiring work that for years has been a feature of the selling in every city. Spring has proved itself a good time to talk housewiring, and last year the Society for Electrical Development undertook to tie these scattered local efforts together by welding them into a broad national movement in which each experience was made available to all and the impetus of the entire industry—national publicity as well as local selling—could be co-ordinated. It was a big success, though, being a new idea but a small proportion of the towns that will line up for it this spring, were actually engaged. But it proved that nation-wide

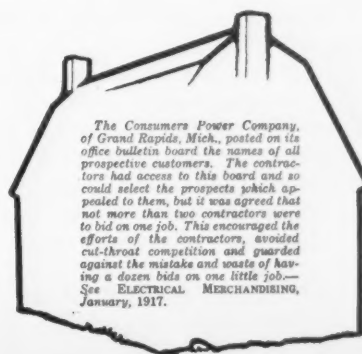
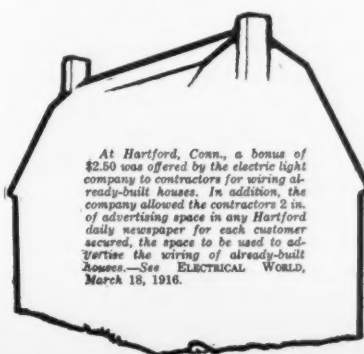
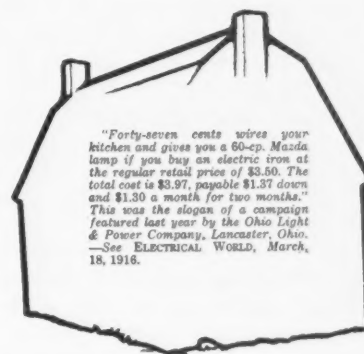
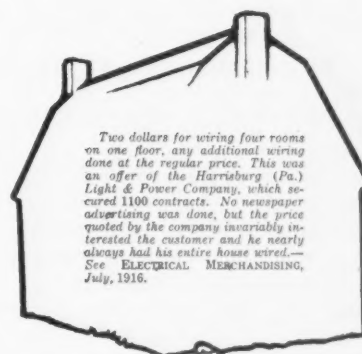


Home-Time"—April 1 to May 15

co-operation in wiring is no less effective than good team work in a national Electrical Week celebration.

This year the Society for Electrical Development has organized a six-week housewiring campaign which will be featured throughout the country as "Wire-Your-Home-Time," and will extend from April 1 to May 15. Plan books have been prepared which lay before you in full detail the many campaign plans that have been used successfully in wiring drives in cities large and small in every section of the country. With one of these handbooks any contractor or central station may work out just the offer that will best suit his own case. The Society has also prepared a set of special newspaper advertisements for the local man to use in putting "Wire-Your-Home-Time" before his own public, and cash prizes aggregating \$1,250 are offered in a contest open to house-wiring salesmen in the employ of contractors and central stations.

Here is opportunity enough for all of us. Look back through your files of ELECTRICAL MERCHANDISING and ELECTRICAL WORLD for house-wiring plans there printed. Secure, also, the Society's Handbook at once. Find the plan that offers most for you. Then organize the electrical family in your town for a "Wire-Your-Home-Time" campaign that will break all previous records.



come in for demonstrations, but not any more; the women in my territory tell me they'd rather visit the morgue."

"Is it that bad?" asked Davis, plainly nettled.

"It's worse," piped up Micky. "I once asked an old wife from across th' tracks to come into the display room. 'An' what's that?' says she. 'Our place over on Main Street where we display things,' says I. 'Micky Daly,' says she, 'the only thing I seen displayed in that place were averice by th' cash-here an' impudence by th' mangy old cat of a clerk. I'll not come there. You can bring that washin' machine here in a wheelbarrow or I'll no look at ut.'"

"Gee whizz!" snorted Davis, "things are worse than I thought. We've got to make a change, and, believe me, it'll be a quick one. We'll remodel the whole place if I can get the Big Boss to give us the money—and I guess on our record he'll do that."

"What we need is a row of nice show cases along the east wall," began Jack Reeves, "and a line of tables to display lamps, and a walled-off room for fixture displays, and —"

"What we need," cut in big Jim, "is a guy who knows something about stores and storekeeping to sit down and plan a real retail merchandising shop. I've been around quite a bit, and these amateur central station shops give me a pain. What do we know about it? Nothing! Old Man Dowd wouldn't let a coal passer design his new turbine station, would he? No; he gets the best consulting en-

gineer in seven states. Why shouldn't we get a consulting store engineer? What we want is not an experiment, but a certainty. I move that we do the thing right or not at all."

"That's the idea, and we'll do it. To-morrow I'll see Mr. Dowd and get him to make an appropriation for designing, equipping and manning the new store. The windows are part of the store, and they'll be built right at the same time. And we'll have somebody to take care of the windows right, and we'll have clerks who are not re-

spectable maiden dependents of the boss's wife.

"Yes, fellows, we'll have a real store, real window displays and real advertising—all hooked together into one selling system.

"And," concluded Davis, "the 'bogey' for next year will be just 50 per cent increase in merchandise sales over this year. That's the record we will have to make to justify the cost. Can we make it?"

Every voice answered, "You bet!"

"Meeting adjourned."

The Day of Better Credit Methods

Progressive Manufacturers and Jobbers in Electrical Field
Profit by Liberal Policy Toward Credit Departments

By FREDERIC P. VOSE

General Counsel, National Electric Credit Association

THE common game of making sport of credit men isn't as much in vogue as formerly. Particularly is this true in the electrical trade.

Anciently, the C. M. might have been pictured as a static machine, operating at a desk eight to ten or more hours per day, and 360 or more days and nights in the year, with more than less friction.

The machine never created the current of commerce. It momentarily checked the current's course, sometimes delayed or dammed it altogether. The daily grist was figures, ledgers, reports, references.

While the sales manager rubbed elbows with the crowd, made and spent money, ate, drank, made merry and grew fat, the gaunt and grinding C. M. became dyspeptic, distrusting. Every man was against him, particularly the S. M. and the customers.

All this was the fault of the general management, and still is, if there yet is friction and lack of co-ordination between the sales and credit departments.

Under the convenient excuse of economy, a short-sighted saving was secured in an underpaid and poorly equipped C. M. The management might provide a fortune for advertising campaigns, and a feast for the sales departments,—at the same time failing to recognize the utter inconsistency in neglecting to furnish the credit department with adequate men, methods and means to match the

other departments, in properly caring for the business created.

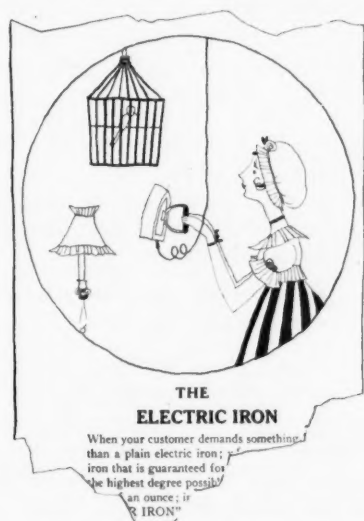
If the C. D. is the weak link there results: Business turned down which could and should be retained profitably. Accounts improperly handled, occasioning abnormal losses.

It has required years to enlighten the heads of many houses to the point of becoming convinced of the gains which follow a liberal policy toward credit departments. Some, unfortunately, are still in the dark. Such companies are known by the men they keep.

The corporations advancing steadily are those which, among other progressive policies, have each department manned with those who mutually respect the talents and judgments of the other, and all together pulling for the profits of the house.

Some of the brightest and brainiest men and women in the electrical industry are to be found in the credit departments of the leading houses. They are students of system, economics, finance, legislation, etc. They are business boosters and profit producers.

Twenty years or so ago representatives of this class were the exceptions. To-day the credit managers in the electrical trade are second to none in the entire credit field. They are worthy collaborators with the master minds, scientifically and technically educated in our industry. They share the honors and rewards of the marvelous development of the electrical age.



"I gotta go out on th' street and buy a paper before I know what th' day's ad is about," exclaimed Micky. "An' when I get ut, it most probably shows Tango Tessie triffling with a flatiron in a budwar instid of an honest colleen smoothin' th' old man's cambric shirt in a decent kitchen."

To Cash In on the "Kitchen Movies"

How You Can Use the Stories in the Women's Magazines
to Help You Boost Appliance Sales

By CLARA H. ZILLESSEN

Advertising Department, Philadelphia Electric Company

WE BELIEVE that you will read this article with not only interest, but also some astonishment that you had never thought to make use of the stories and articles in the women's magazines that come into your town each month, to help you sell appliances.

You have overlooked this because you are a man.

But the women's magazine is the trade paper of the household—the journal to which the housewife goes for ideas and suggestions in her craft of homemaking and housekeeping, just as the electrical dealer or contractor reads his trade journal to keep abreast of the best ideas in the merchandising field and to keep ready to supply the housewife's call for the things electrical she reads of or hears of.

Miss Zillesen writes, first of all, from the woman's point of view—but also from the standpoint of a practical experience that has seen the application of these ideas win sales results.—THE EDITORS.

LADY came into an electrical store the other day and asked the salesman whether he would be good enough to show her one of the electric cooking utensils which the *Ladies' Home Journal* was showing in its "kitchen movies." The salesman hadn't the faintest idea what the customer wanted; neither did the other two salesmen, nor the proprietor, nor the errand boy, nor the elevator boy, nor the stock clerk. Only one person in the store knew what was called for and that was the boss's eight-dollars-a-week stenographer, who, when called upon as a last resort, pulled a recent copy of the *Ladies' Home Journal* from the back drawer of her desk and pointed to a page of "kitchen movies"—otherwise known as first aids to cooking.

WHAT THE "KITCHEN MOVIE" OFFERS

These "movies" are unique in that they represent the application of a popular idea to an ordinary, everyday subject and have lent it some of the glamour of the motion picture. You may not believe it, but it takes imagination to visualize an appetizing and satisfying dish from a lot of miscellaneous ingredients such as flour, butter, paprika, parsley, sugar and the like. It's almost like reading an unillustrated ad about a new automobile which you have never seen, and trying to visualize the completed car from such details as cantilever springs, stream-line body, sleeve-valves and red wheels. So this new method of illustrating recipes has caught hold immediately with housewives all over the country.

Naturally, the tendency of the housewife is to follow the recipe picture for picture and do just exactly as the pictures and directions say.

The point of interest to us is that the "movie teacher" uses an electric grill and electric toaster in her lessons. The housewife, then, fearing to make a mistake unless she follows directions exactly, immediately considers the purchase of such appliances.

Suppose that shortly after she had received her copy of her magazine this Mrs. Housewife found an enclosure in her electric bill calling her attention to the fact that your store would be glad to send her one of the grills or toasters on ten days' free trial; or suppose that she should see such and such an ad in her favorite newspaper; or should pass your store and see a window display of grills and toasters tied up to the ad page in the woman's magazine; or that she should receive a letter from you calling attention to the appliances in question! It needs just such an incentive to bring her to the buying point.

WHERE THE VALUE LIES

Why are national advertisers so insistent that their dealers tie up with their ads? Because they know that mere spread-eagle advertising will not sell enough goods to justify the money spent; that advertising must be followed up by sales effort and active co-operation, and the same reasoning holds good in the point in question. While free advertising and editorial mention of electric household labor-saving devices is unquestionably doing much good, its greatest value will not be realized until electrical dealers take advantage of it by tying up their own advertising and sales effort with these national impulses.

The "kitchen movie" incident is not an isolated example of what the housekeeping magazines are doing to broaden the market for electric serv-

ice and electric appliances. In the December, 1916, issue of *Good Housekeeping* there appears an article on all-electric kitchens; also an article on the proper method of washing clothes, with decided emphasis on the electric method.

In the January issue of the same magazine Dr. Harvey Wiley of Pure Food fame, writes anent the eight-hour day for housewives. Read what he says about labor-saving appliances in the home and decide for yourself if that article isn't going to plant the seed of rebellion against old-fashioned methods of housework in many a home that can afford to have electric appliances. Dr. Wiley says in part: "There is no excuse for putting all the labor-saving machinery on the farm and in the factory. A fair share of it should go into the kitchen of every home. * * * If the woman is going to have an eight-hour day, she must be provided with eight-hour machinery. In point of fact, the laborer of to-day who builds the house or works in a factory produces more work in eight hours than his grandfather did in eighteen hours. Not so with the woman in the house. Therefore, the first value that the woman can get out of the eight-hour law is an eight-hour equipment!"

THE INFLUENCE OF THE "WOMAN'S" MAGAZINE

Now, *Good Housekeeping* magazine has influence with its several hundred thousand housewife readers of high intelligence to a degree that the publishers of ELECTRICAL MERCHANDISING and other trade papers for business men will never realize; for never, except in the most exceptional cases, do men cherish and put into practice the information in their trade papers as

the housewives do theirs. For these "women's" magazines, as men more or less indulgently call them, are trade papers in the real sense of the word. The man is either a jobber, a manufacturer, a central station man, a contractor or dealer—never all of them at the same time. The housewife, on the other hand, if she is at all up to her job, is an expert cook, laundress, nurse girl, seamstress and purchasing agent all in one. She reads her trade papers very carefully because she needs them in a dozen ways.

The selling value of this article in *Good Housekeeping* and the other articles which are bound to appear in this and other magazines of the same class, surely should be taken advantage of by every electrical dealer without delay. This tying in with her favorite magazine is unusual enough to make the housewife sit up and take notice. Moreover, it is not good business to let anything like this get by without giving it a chance to see what it can do for you.

HOW TO APPLY THE GOOD STUFF

One way of applying such opportunities would be to make a window display of a model kitchen, tying it up with the article by having a half dozen or a dozen copies of the magazine in the window—opened at the article and just stacked up. (This will attract attention in itself, for the covers on these magazines are generally very distinctive and attractive.) Another way would be to write a letter to a selected list of housewives, calling their attention to the article and offering to send them a copy of the magazine if they did not already possess one. This would be a less expensive way than the window display and quite as effective.

A window display somewhat cheaper in cost could be built around the washing machine article, for instance, by making a washing machine, iron and mangle display and having display cards on the various articles quoting the magazines' comments and the figures regarding their use. Another effective way would be to have the monthly bill enclosure bear a notation of some article on electrical appliances each month. You will have plenty material to work from, for never a month passes nowadays that some one of the women's magazines does not carry an important editorial mention of electrical helps for the household.

Every man who sells electrical appliances to the public will find it astonishingly helpful and valuable to subscribe to a dozen of the best household magazines and keep them on file in the office for reference. This is the first thing to do. Often you will get advertising and sales suggestions from them, and never should you miss the opportunity of tying in your appliance sales with the opportunities afforded by the various articles. The subscription price of these magazines ranges from 75 cents to \$2 a year—and a low subscription price is not always an indication that the magazine is cheap. One magazine, in particular, costs only 75 cents a year—but it has a subscription list of 2,000,000 housewives, and when you stop to consider the enormous circulation of these magazines and the number of good ones that the publishers offer, you will

realize that they are a very important factor in the business of making homes out of houses. And when housewives show an interest in the art of making homes out of their houses it is time for the electric appliance man to be on the job.

Here in Philadelphia we have passed the novelty-appeal stage in advertising and selling appliances. We are concentrating our appeal, for the most part, in the form of special campaign offers and easy terms. We plan to devote ourselves more and more to the practical appeal—the most potent one to the housekeeper. And this tying in with the practical side of the housekeeper's work is not only going to mean increased immediate sales; it is going to mean as well that the appliances sold will stay connected to the system and not be kept on the pantry shelf for occasional use.

Waking Up to Appliance Business

How the Contractor Can Profitably Increase the Gross Return from His Wiring Jobs by a Few Minutes' Selling Effort



"Lo, BILL, you're looking happy," greeted plumbing contractor Ed Sterling as he waited for his friend to catch up with him.

"Happy is right, Ed. Just landed the electrical work on Mr. Dalton's new house."

"Good work," smiled Ed. "I have the plumbing for it myself. After I got it I went up to see Mr. Dalton, and I told him what some new goods in my line would do to improve the job. Sold him a new type of shower bath, special relay valves for the boiler, and a bunch of other good stuff."

Back in his shop, Bill thought things over. His shop was on a busy street, yet there was nothing interesting in his window. His only stock consisted of wire, conduit, and tools. Other material was ordered as he needed it. If Ed could increase his profit on the Dalton job by selling some extra plumbing appliances, why shouldn't he follow suit with electrical goods?

The next day he went to the city, visited leading jobbers, and

studied the display rooms of the central stations. The same evening he called on Mr. Dalton, and, armed with attractive catalogs, explained to him how modern electrical appliances would add comfort, convenience and economy to the new home.

Mr. Dalton was interested in the variety of electrical wonder workers that the market offered, while Mrs. Dalton was frankly enthusiastic. Result: Bill added \$156 to his original contract of \$150, made two new friends, and sold himself on the question of carrying an up-to-date stock of electrical goods, with a well-trimmed window in his shop to tell the passing public about it, while he was busy. Here's the way his new bill on the Dalton job looked:

Original contract, wiring.....	\$150.00
Additional wiring, new outlets....	40.00
One electric fan.....	18.00
One vacuum cleaner.....	40.00
One electric toaster.....	7.00
One coffee percolator.....	19.00
One electric plate warmer.....	25.00
One electric iron.....	7.00
Total	\$306.00

GETTING AT "THE NET"

The Dealer Who Wants to Make Sound Profits Must Know His Costs Just as He Knows His Gross Sales—The Interest Burden of Slow-Moving Stock—Quick Turnover that Wins Profits from Narrow Margins

EVERY man in the electrical merchandising business ought to stop now and then and ask himself the questions, "What does it cost me to do business? and what am I making in the way of actual profits?" And he should not stop with merely asking, but pursue the query to its logical end of finding out the facts.

No dealer in electrical or any other merchandise can know whether he is making money or not, if he does not know what is his cost of doing business. It requires regular inventories and an adequate accounting system to enable a man to know how he stands at all times.

Accounting and inventorying systems can, of course, be made so elaborate and complicated that they take so much time it would almost be cheaper to fail. But with the aid of modern mechanical office helps, little of the dealer's time is required for keeping sufficient accounts to make the condition of

the business ascertainable whenever he wants to know.

Every dealer keeps some books. The most shiftless has at least a book in which he sets down the money he pays out, and at the end of the year he foots it all up and calls it his total expenses. But this much information is only a beginning on finding out what it costs to do business.

There are in the cost of running your business other items than rent, light, heat, advertising and clerk hire. And without inventories at least an-

nually, these other items cannot be known.

Unless you have an inventory that tells you what your stock is now, you have no way of knowing whether you are carrying more or less stock than you think. That means that you may be paying unnecessary insurance premiums. It means that you may be carrying too large a stock and thus paying too much interest, taking too large a depreciation, losing too much

cheat yourself. On the other hand, if you omit from your inventory goods that are somewhat damaged but possessed of a value of some sort, you are foolish. Use your judgment and put a fair valuation in the inventory on everything in the place, and then proceed to get rid quickly of the goods that are going to depreciate farther.

Because the dealer does not like to bother with business accounting does not excuse the results that come from

lack of attention to matters of this kind.

Many a dealer has lived along for a number of years in a sort of fool's paradise, only to find that the little troubles of accounting, thus escaped, had in the end multiplied into big troubles that could not be escaped.

Unless you are absolutely certain, with figures to prove it, that your business is paying you a good net profit over and above your salary, you might better sell out and go to work for a business man, putting your capital into a savings bank where you



It is quick turn-over of a small stock that enables the electrical dealer to do good business on a narrow margin of profit. Carrying too much stock keeps money tied up and eats up profits.

No man can successfully conduct a business without knowing his costs, and using every means to get at the vital facts of income, expenses, overhead, and the final "net." For example, the dealer whose shop is shown above makes use of a cash register, a sales recorder, an adding machine and an intercommunicating telephone, besides the usual office equipment of telephone, typewriters, etc.

No man can be sure that he is getting all the money taken in in his store unless he has a system for handling that money as it comes in, and properly accounting for it.

on damaged or superannuated goods.

You can lay aside a batch of dry cells that are a loss and forget all about them, but that does not prevent those dry cells from making their appearance some day in your financial statement. Damaged and shop-worn goods are going to come up in your cost of doing business some day and the right thing is to charge them up at the outset.

If you inventory at full price, slightly damaged goods or goods in any manner depreciated in value, you

would be sure at least of your little 4 per cent.

Do you figure into your cost of doing business the depreciation on your tools, on the equipment and fixtures in your store or shop? That is where such a loss should be put. This loss should be figured in by rule rather than by actual, visible loss of value, because oftentimes the loss will not be apparent until it is total. Some part of your outfit may work just as well or be of just as much use every day until it is totally worn out as if

it were new, but unless you have figured a gradual depreciation on it, you find it necessary to take the whole loss at one time. It is better to take 5 or 10 per cent depreciation per year on certain items than to take none until it is necessary to take 100 per cent.

Here and there a dealer is found whose business figures amount to little more than a joke—and of course the joke is on the dealer. There are some men who do not even figure their own salaries into the cost of running the business. They help themselves to money when they want it and let it go at that. Others who own their own places of business do not figure in rent or provision for getting any return on their building investment.

Every business man can make it pay him to study all the business literature he can get time to read. It is a wise man who reads something good and instead of saying to himself, "That would be a good thing for Jones," frankly exclaims, "By George, that hits me all right!"

If you keep a careful set of accounts on your business, you can find out at any time just what you want to know. When you get curious about the financial condition of your business, you can get closer to exact knowledge of it than a mere guess. One of the things that makes the income tax worth its cost to most business men is the necessity it provides for a man finding out just what his business is doing. So many men never get around to it to make such a set of figures of their own initiative, that it is a blessing to them when the government steps in and compels them to do it.

SELL, BUT GET YOUR PROFIT

It is not all of success in operating a business in electrical merchandise to be able to buy and sell a lot of goods. Anybody can get rid of a lot of goods if no particular attention is paid to making a profit on them. Unfortunately if a dealer is not careful to make a profit, basing his net profit on the cost of the goods *plus the cost of doing business*, he cannot hope to be successful. Because men once opened stores and sold goods and made money without keeping any books other than to charge credit sales is no reason for thinking it can be done to-day. Profits are not such as to allow any carelessness of method.

No man can guess at his stock with-

out inventory and guess close enough to answer the purpose. It can't be done. Ask any fire insurance man.

No man can guess that he is getting all the money taken in in his store and have no system for handling that money as it comes in.

No man who guesses he is getting the best trade of his community can really know whether he is or not.

Some dealers think they have the most attractive and the best paying lines they can get, but never having taken pains to find out, they are pretty often wrong. Some competitor who is always watching the trade paper advertisements, may be showing better lines, and better paying lines, and so gets the business and makes the money. Guess is the wrong way to go in any work.

ABOUT CREDITS AND COLLECTIONS

Among other things you need to know in connection with the state of your business finances is the proportion of good, bad and indifferent accounts on your books. It is an easy matter to let a year's profits accumulate on the books. It is also an easy matter to let them stay there. If too much of your profit is going on your books and staying there, isn't it about time for you to make a change in your collection methods?

Perhaps you and your salesmen are to blame for many of the uncollectible accounts on your books. If you encourage a customer to buy more than he can easily pay for, if you urge him into buying better goods than he ought to buy, income considered, and then he is unable to settle, who is to blame if you have to take a loss on the account?

And don't be afraid to say "No" to a man who wants credit but is not worthy of it. You are better off though you lose a sale now and then. There is no money in selling goods for which you get no pay, or only enough of the pay to cover the cost of the goods at wholesale.

Of course you cannot always know just who to trust and who to distrust, but it is your business to find out. When you are buying stock, you meet with no hesitancy on the manufacturer's part about his determining whether you are entitled to credit or not. In the same way make it your business to get at the credit responsibility of people buying from you.

If you keep the doubtful accounts small, they will be the more easily

collected. As the old saying goes, "A short horse is soon curried." And don't let any account stand long without a reminder of its existence. Begin sending statements at the end of the first thirty days and keep sending them. When you find a man who is offended at your business-like ways, you find a man who is a doubtful risk anyway. Remember that short credits make long friends.

It should be a part of your knowledge about your business to know how many times a year you turn your stock. If you buy a stock of goods and sell it all out once, you have turned your stock once. If you sell all out and buy and sell out again, you have turned it twice. Naturally this cannot be done in so complete a manner. Goods are moving constantly.

To find out your stock turnover, divide the *cost* of the goods sold by the inventory and you will get a reasonably correct idea of your turnover. To find the cost of the goods sold, take the purchases of the year and add any decrease in inventory, or subtract any increase.

It is quick turnover that enables one to do business on a narrow margin of profit. Carrying too much stock keeps money tied up and eats up profits. It is absolutely essential to your business success that you know, also, all about what it costs you to do business, why it costs so much, and whether it cannot be made to cost less.



Selling the New Wiring Customer's Friends

By R. C. HERBEIN

Lehigh Valley Light & Power Company,
Allentown, Pa.

Friends and relatives of a new wiring customer make the best of "prospects" for a wiring solicitor. By engaging the customer in conversation and by observation, the salesman can learn who constitute the customer's friends, and these can be followed up and the proposition of electric wiring brought before them, using the customer's installation as a reference for the comfort, convenience and cleanliness that electricity affords. For it is a basic trait in human nature to want to enjoy the same conveniences as one's friends and associates.

THE WAY OF THE VACUUM CLEANER

How the Electric Sweeper Idea Spreads
and What It Offers You Next Month

By W. E. BAYARD

THE new schedule of co-ordinate sales and advertising that the N. E. L. A. has promulgated for the industry sets aside the month of March for a nation-wide campaign on vacuum cleaners. It is an appropriate time, for sweepers sell well in the spring. But have you planned what you are going to do in your town?

As a matter of fact, you are, sooner or later, going to do exactly what they have done or will do in every other city. You are going to make a big spring drive on vacuum cleaners and sell a lot of them and make a lot of money at it—if not right now, this spring, why then, next spring, or another year. For, sooner or later, every man wakes up and falls in line. Perhaps you have already climbed aboard the wagon, but if not, you will. For instance—

One morning about three months ago a salesman for one of the leading manufacturers of electric cleaners dropped off the sleeper in a certain little city in Kansas and made a bee-line for the lighting company's office. (And this is true, just like I'm telling it.) This salesman sells one of the best known sweepers on the market, a machine that is nationally advertised and has built up a tremendous business through co-operating in local central station campaigns. But they never had been able to sell this Kansas manager. He had no fault to find with the machine. He simply couldn't see the vacuum cleaner as a revenue producer or as a feature of the

service worth the trouble of a campaign. It hadn't "gotten" to him right, that's all. But the salesman had come down this time for the plain and simple purpose of putting it over on some kind of basis that at least would demonstrate the value of the vacuum cleaner and get things started.

The manager was in his office and cordial enough. They gossiped a bit and finally swung around to talking cleaners, and the salesman said: "It's up to me to sell some cleaners in this town. My boss simply can't understand why I can't get a campaign running here that will be just as big a success as in any other neighboring city. He says your people are just

human beings like the next, and that if they need cleaners in the other town they need them here, and will buy them just as quick. It's up to you to be a sport and try it out between now and Christmas or by Heck! I'll put on a campaign, myself, and show you what's what.

"All right," said the manager in a bantering way, "you talk about being a sport. I'll just call you on that one, and I'll lay a little bet that you can't put on any campaign in this town that will make me change my opinion of the cleaner. Now go to it."

"Alright," replied the salesman. "You're on! If you won't buy the cleaners then I'll sell 'em myself and

I'll just ask you for two things—your list of customers and permission to work my salesmen from your office. The rest is up to me."

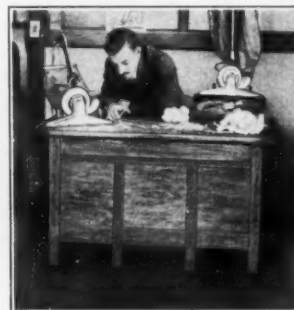
And so it was. The manufacturer put a campaign on and in that Kansas town sold over 700 electric cleaners without the central station turning a hand. And naturally, this manager is now a convert. It was a demonstration, certainly, that the cleaner *would* sell in that town—that it was worth while from the revenue standpoint, and as a feature of the service. For though a single cleaner brings in but a small amount of money yet when you multiply that figure by 700 you have a very respectable addition to your income. And from the service standpoint, surely, if any labor saving appliance actually appeals to 700 customers and makes them

Demonstrating Vacuum Cleaners from a Counter

Selling suction cleaners from a counter instead of demonstrating them upon the floor is the method now used by the makers of several cleaners. At the Ohio Valley Exposition in Cincinnati, the Royal Company's display was featured on a small counter so that the cleaner was operated just below the level of the prospect's eyes.

On the rug near the cleaner the salesmen had assembled three piles of dirt; one of hair pins, common pins, fine bits of paper, paper clips, rubber bands and such refuse as is found in offices; another consisted of cotton batting, hair, strings, tacks, lint, matches, pieces of paper, as in homes; and one of ordinary dirt such as is tracked into stores and shops. The on-lookers were asked to grind dirt from any of the three piles into the rug in such a way as to make it seem impossible to take it out. Then when the cleaner would immediately gulp up every vestige of it they realized the power of the machine in a way that words could not convey.

W. E. Pellett and H. Clay Baker, in charge of the Cincinnati demonstration, explained



When the crowd about the cleaner "needed coaxing," one end of a long piece of paper ribbon would be started into the machine. The rapidity with which it disappeared always created interest.

that the advantage of demonstrating on a counter was not alone in the better view afforded the customer, and in the floor space that it saved, but in the opportunity it presented to talk to the prospect face to face instead of from a point 6 ft. away across the floor. It helps drive home the force of the literature and connect it up more definitely with the machine itself, and it gives a better opportunity to study the prospect's face and approach the "close" more intelligently.

use electric service more and place increased dependence on it, it is a big thing for the central station to achieve. And in this instance, it had not cost the local company a copper kopek.

ONE TOWN QUITE LIKE ANOTHER

There is the recent experience of this one Kansas city. The same sort of thing has occurred with varying conditions and results in one town after another year after year, and will continue to be re-enacted until every dealer, every contractor and every central station man has *waked up* to the possibilities in—not the vacuum cleaner—but in 1000 cleaners or 5000 cleaners—all depending on the size of the community. For put out your 1000 cleaners and they pay good money to the lighting company in the aggregate. And the selling of them pays a good and ample profit to the dealer or the contractor or whoever gets the orders, and unless they are indulging in deep sleep beside the switch, there should be many opportunities to sell a current tap or a double plug and to install additional base board receptacles—good-profit wiring jobs.

It is the same in every town, where people live in homes like people, and if you disagree with me and think your town is different, all I can say is this—that you will change your mind some day and wonder why in thunder you had overlooked this bet before.

One or the other of two things seems to be necessary to the sale of an electric cleaner—the woman or the man who buys must either have imagination or a demonstration—and this applies no less to the dealer who buys from the manufacturer than to the housewife who buys from that dealer's salesman. Most women do not become enthusiastic until they get hold of the handle of the cleaner themselves and try it out on a regular rug and it isn't the cleaner that they look at, it is the ease-of-sweeping that is worth the money to them. And the dealer doesn't begin to get excited until he sees himself selling not a single cleaner but 400 or 1000. But just as soon as you accept the unquestionable fact that other dealers, other central stations sell 'em by the hundred, and then admit that if they do it so can you, you see the light. You are converted. You see the opportunity in its real

proportions and the cleaner starts to pay you what it owes you.

Next month there will be vacuum cleaner campaigns in many cities, north, east, south and west.

Now is your time no less than any others. For if you do not sell the cleaner now you surely will a little later on and in the meantime you are losing money.

A Seattle Dealer Who Emphasizes "Plain English" in Selling Appliances



HERE'S an electric store in Seattle, Wash., where an inquiry about an electric iron or toaster stove does not provoke an answer full of technical language. Customers are told of the operating costs of appliances in cents per hour rather than ratings in watts, while the discussion of amperes, volts and cycles is never forced upon the prospect who is unfamiliar with such terms.

It's the shop of the "Lushington 'Lectric Company." F. B. Lushington has his own ideas about the use of technical terms in selling goods to non-technical patrons.

"Show me a woman prospect," says Mr. Lushington, "who has been swamped with kilowatts, amperes and like twaddle of interest only to us in the trade, and I will show you a woman prospect who is leaving your store hurriedly, in search of an electrical shop where the employees speak plain 'Electrical English.'"

"Tell her that 5 cents will curl her hair five times or will make the

breakfast toast five mornings. Do this, even though she has first inquired about some other article in your stock, but don't scare her off with technicalities."

The Lushington firm has "both eyes open" for new business and makes a point of gathering tips from newspapers and trade publications. A list of building permits furnishes names and addresses of owner, architect and contractor, and the approximate cost of new structures.

The first call of a salesman is made to acquaint the people interested with the fact that supplying electrical goods is Lushington's business. The privilege of submitting figures is requested and an invitation is extended to visit the store before a purchase is made. Out-of-town business is solicited by mail and the element of personality is emphasized in the store's correspondence.

No purchaser or "prospect" ever passes out these doors with an uncomfortable feeling of having been "swamped" with technical language within; plain "Electrical English" is a tradition with this Seattle electrical dealer.



The store of the Lushington 'Lectric Company where the language of the customer is spoken and understood

CHOOSING FIXTURES FOR YOUR RETAIL STORE

How the Standard Equipment on the Market Can Be Adapted to the Special Needs of the Shop That Sells Electrical Appliances and Supplies

ONLY last week a successful electrical merchant in New York City made the statement that when he decided to open his retail shop he was "up against it" for store equipment. He did not know what kind of fixtures would best serve his needs nor where to get them; nor had he any definite knowledge of how and where to display his goods, nor how to obtain suitable material for decorative purposes, in fact, most electrical merchants are confronted with the same handicap.

The shoeman, on equipping his store, has such information ready at his hand. He learns from his trade journal not only the names and locations of fixture manufacturers, but he reads in these journals timely and authentic articles on selling through display. A card sent to manufacturers will bring him catalogs and literature from which he can select the desired racks, pedestals, plateaus, etc., to properly hold and display footwear. On request, the manufacturer will also send samples of draperies, velours, foliage and other decorative material. When the shoeman, the haberdasher or the department store manager selects his fixtures he does so with the aid of suggestions from men who make a special study of how to display each article to its best advantage and who build the stands, racks, cases, etc., used for display purposes.

But up to date Mr. Electrical Merchant has had a hard time when he starts after store equipment. The fixture manufacturer's catalogs do not

list cases marked, "For electrical toasters" or stands marked, "Especially Suited for Flashlight Displays." There is not cataloged a single table or case or pedestal which is fitted with so much as a lamp socket. In fact, there appears to be nothing that the electrical merchant is sure he could use in his store.

A little study, however, will reveal that there are many fixtures which can be selected from the store-equipment manufacturers' catalog that will serve useful purposes in an electrical shop. In the following paragraphs an endeavor has been made to point out such equipment as will best answer the purpose of the electrical storekeeper.

FLOOR DISPLAY CASES FOR APPLIANCES

For their floor display cases many dealers use standard beveled plate-glass cases with glass shelves on adjustable brackets. To make such a display more effective it should be lighted from the top of the case by some form of a continuous reflector light source. Too many dealers display a variety of appliances in such a case without regard to whether the item is shown up to advantage or whether the case is merely a place to put the appliance in.

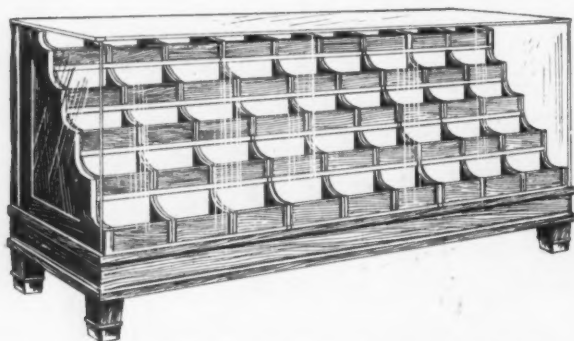
A "candy case" or "sundry case" like that illustrated herewith, affords an attractive display for electric toasters, percolators, and hollow ware. It is well to substitute a mirror back and floor for the ordinary wooden ones. This gives an appearance of double

the amount of stock and also shows an article from both sides. What the trade knows as "jewelry cases," both floor and wall, "wall hat cases," and "millinery cases" can also all be made into very attractive show cases for electrical vibrators, small lamps and fans, etc.

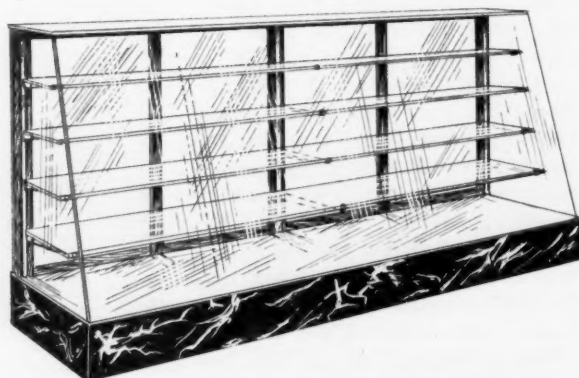
One excellent method in the case of a wall fixture is to remove all the shelves from a "hat case" or an English wall case and line the interior (that is, the floor and back of the case) with a heavy dark plush or a dark velour, then mount the smaller and lighter articles such as hair driers, curling irons, etc., on the back and stand the large fans, electric lanterns, drink mixers, etc., on the floor. With the aid of a reflector light these articles will show up very distinctly against the dark background. The drawers in the lower part can be used for storage purposes and in case these are of glass such space can be used also for display purposes.

GOOD USE FOR THE "NOTION BIN COUNTER"

One illustration shows a standard floor "notion case" which can be successfully used as an electric accessory case. It contains a number of bins in which small items—sockets, conduit fittings, bushings, nipples, etc., can be shown in a front compartment of each drawer while the drawer proper, which pulls out from the rear, holds a considerable supply of the same article. A clamp holding a price card can be fastened on the front of each bin.



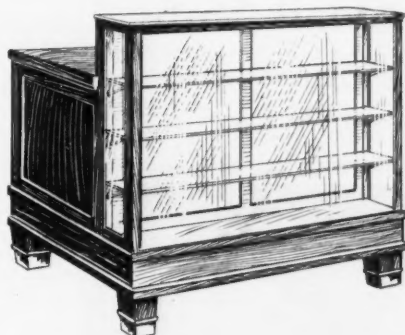
Attractive display of small parts and supplies with convenient storage, is provided by this "notion bin case."



Back and floor mirrors multiply the apparent number of appliances in this "sundry case," as the maker calls it

This case has the advantage over an open notion table in that no dirt can settle on the accessories and also it guards against theft.

Another illustration shows a wrapping counter fitted with a show case front. This fixture obviously serves a double purpose. The wrapping counter is complete in itself with a solid top and a storage space below, while the glass front offers excellent display space and at the same time hides the less attractive wrapping counter with its cord, papers, tools, etc.



This combination wrapping counter and display case places percolators instead of wrapping paper in the customer's view.

SPECIAL DISPLAY FIXTURES

Certain standards or display racks such as the steel frame supporting the swinging leaves, shown in the illustration, are necessarily of special design. The leaves may be made of any size and afford a very convenient method of offering to the public the smaller items—lamp globes, lamp sockets, fuses, porcelain rosettes, etc. Often the buyer knows what he wants, but he does not know the name for it nor can he describe it intelligently. If he is shown a complete assortment he can immediately point out just what he wishes, thereby saving him any possible embarrassment and also saving the time of the salesman. Such display racks increase the number of sales, for customers frequently buy extra fittings on sight which they would not remember to ask for. Manufacturers will gladly mount a complete assortment of their wares for a retailer free of charge and will also mark and number each item.

One New York dealer has in his

store two booths very similar to telephone booths, only somewhat larger. These booths are strongly lighted from above, and by having all three sides closely mounted with small accessories make a striking display.

This same merchant uses a large table in the front of his store on which to display his reading lamps. The table is wider than the ordinary table, measuring about 6 ft. by 12 ft., and is covered with a heavy dark green plush which reaches nearly to the floor on all sides. Such a cover gives a rich appearance, although the table itself may be an improvised structure. The width of the table and the attractive covering add greatly to its appearance.

The question of store shelf ladders is also an important one. A good ladder properly installed not only makes it possible to use shelving clear up to the ceiling, but, what is more important, it facilitates reaching an article which may have been put high and above the regular shelving either

to effect a better display, or because it is seldom called for.

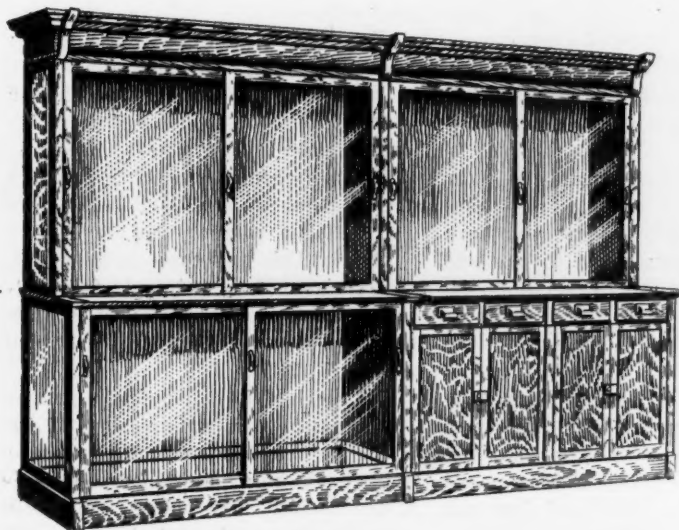
This is but a hasty sketch of the way to adapt standard store fixtures to the special needs of the electrical merchant. That such equipment should be adequate, attractive and of good quality goes without saying. Also it is an axiom of merchandising that any fixture which facilitates any transaction or improves store service is an asset to any business.

A "Ladies' Day" in the Electric Shop

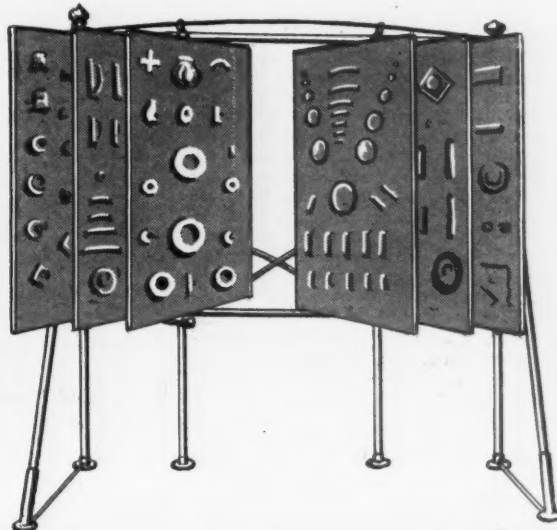
An Indiana dealer in electrical supplies holds what he calls "Ladies' Day" once a year. On this occasion the store is given over entirely to the fair sex. From stem to stern the interior is artistically decorated, small cups of cocoa and wafers are served all day, and a phonograph furnishes popular music.

Another feature of the entertainment is a talk on "Electrical Appliances in the Home" or some similar topic by a manufacturer's representative.

The women, of course, closely inspect the products on display, and the dealer says that actual sales on these days invariably more than offset the expense incident to staging the affair. Results, of course, do not end there by any means. This dealer's list of women customers is large, and the business from his feminine customers throughout the year is an important part of the total sales.



Nickel, copper and silver-plated electrical goods can be effectively shown in this wall case, lined with black plush



Displays of sample small parts on this rack have "loose-leaf" flexibility—new leaves can be added at any time

Remodeling a Small Store

What the Store Expert Did for a Contractor-Merchant Who Could Not Afford a Clerk



"People don't like to come in here," declared the Good-Natured Customer. "I wouldn't come in myself if the other stores weren't so far out of my way."

THE Good Natured Customer is responsible for the transformation of this shop. From time to time he had dropped in at the disreputable little store of "Will, the Wireman," for a plug, a shade or some small repair work on an appliance. He patronized Will's simply because it

was the handiest place at which to buy, but every time he went there he felt as a man does who is forced by circumstances to enter a malodorous eating place. One day he said to the contractor:

"Will, why don't you run a regular store? You could sell a lot of electrical goods here if you'd fix the place up a bit."

"I suppose I could," answered Will, "but the trade wouldn't justify hiring a store clerk, and, anyway, I'm really in the contracting business."

"Then why don't you hire a small office and give this place up?" persisted the Good Natured Customer.

"Because folks expect me to keep some sort of a store. They wouldn't climb stairs to find me. I'd lose business."

"Well, it's my experience that what is worth doing at all is worth doing right. If you believe that you have to run a store you ought to run one that'll pay profit and develop trade. This place of yours is pretty near as bad as a junk shop. People don't like to come in here. I wouldn't come in myself if the other stores weren't so far out of my way. Think it over."

They talked about it for some time, and finally Will decided to let a Store Expert friend of the Good Natured Customer plan a real electric shop for him.

Will's situation was this: He ran a contracting, wiring and light repair business which engaged most of his time, and kept a foreman and from three to eight men constantly busy. His own work as estimator, buyer and manager kept him busy at his desk several hours each day, and he spent about three hours daily on the outside superintending the jobs and soliciting business. A combination stenographer-bookkeeper was his only clerical aid. The illustration herewith shows what Will's shop looked like when the Good Natured Customer undertook to make a real merchant of him, while one of the plan diagrams gives an idea of the store layout.

The first thing the Store Expert did was to make a rough estimate of what it would cost to rehabilitate the place. Then he had a heart to heart talk with Will.

"It will cost you about an even thousand dollars—maybe twelve hundred—to make a real store of this. At 6 per cent, that means \$6 a month interest, and \$20 more a month must be charged as depreciation. That means \$26 a month increase in your expenses."

Will spent a couple of evenings figuring on the proposition, and then went to his bank for advice. As a result of this study he told the Store Expert to go ahead. The second plan shows what the expert did.

* * *

Beginning at the entrance, there was a niche into which an outdoor display case 32 in. wide, 8 in. deep and 6 ft. high was fitted. This added about 25 per cent to the window display efficiency.

Entering the store, the customer sees on his right a long glass wall case containing percolators, chafing dishes, toasters, boudoir lamps, vibrators, etc. This case is listed by the show case manufacturers as a "jeweler's wall case," and costs from \$12 to \$18 a running foot.

Beyond this wall case, on the right, is a series of compartments for holding portable lamps (described on page 19, ELECTRICAL MERCHANDISING for January, 1917).

On the left is a show case of the type known as a notion case, 42 in. high, and containing small trays to hold flashlights, auto lamps, turn-down sockets, fuse plugs, separable plugs, lamp guards and similar small wares. One row of the trays was

A Wiring Contract Won by Better Workmanship

By C. W. COWLES
New Britain, Conn.

In placing an estimate for additional outlets in a finished house, we figured in additional labor and material cost in order to fish all outlets without defacing the fine woodwork of the house. The customer at first considered the estimate very high, in comparison with other bids he had received, but when we explained the kind of work on which our figures were based, we were awarded the contract. As we completed the job without marring the woodwork in any way, the owner was highly pleased with his small extra investment, which he considered insurance money well spent.



lined with felt and used to display the smaller sizes of lamps such as are bought by the general public.

Beyond the notion case is the service counter with convenient wrapping material, and behind both the case and counter are shelves divided off into boxes for holding stock. The cash register fits into a space on one of the shelves.

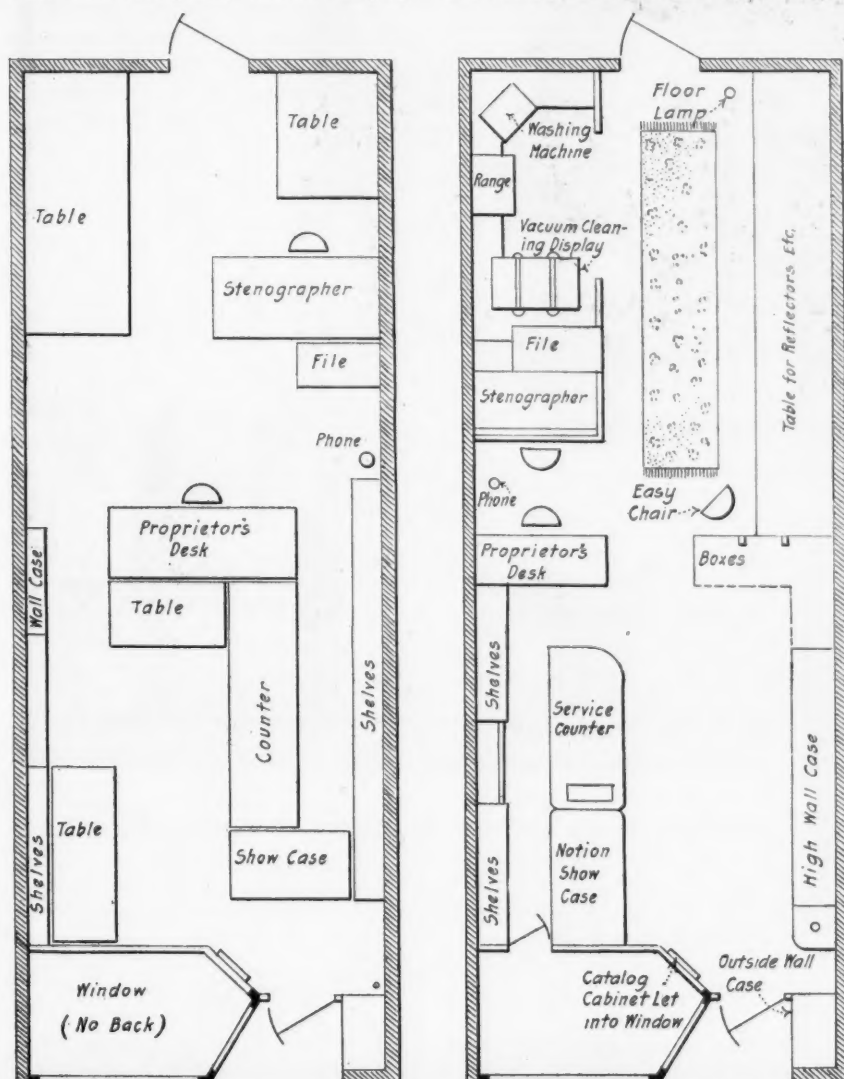
Will's desk faces the front of the store, and is placed even with the portable lamp shelves, making a sort of dividing line between the front and rear. Will sees everyone who enters, and is instantly ready to wait upon customers. His stenographer is placed with her back to the store so as not to be interrupted at her work, but when Will is out a tiny buzzer attracts her attention whenever the door is opened.

The rear half of the store is divided into two parts, one for display

of lighting fixtures and illuminating glassware, and the other for the demonstration of vacuum sweeper, washing machine, and electric range. Will does not expect to sell ranges for some time, but insisted upon having a proper place allotted in his plan. A long narrow rug is on the floor of the fixture display room, and a wicker armchair is provided so that women customers may be at ease when selecting lighting equipment.

The room provided for demonstration of kitchen utilities is finished in white tile wall paper and has a floor covering of linoleum, with a small rug for demonstrating the vacuum sweeper. A kitchen chair is provided in this space for the comfort of women customers.

The whole idea behind the new arrangement can be summed up in five words—to sell goods through display. The customer who wants a turn-down



The store arrangement before and after the expert remodeled it. The investment in salesmaking equipment is justified by larger volume of business



Bell-Ringing Transformer Brings in Tenant Customers

By WILLIAM GEORGES

The installation of bell-ringing transformers in rented houses is a strong influence in bringing tenants to the electric company. When a tenant upon moving in discovers that the door bells are out of commission until the electric service is connected, there is no delay in signing the contract; whereas, otherwise the tenant may procrastinate, using gas or oil, until the lighting company solicitor has an opportunity to make a successful solicitation.

One of the big central station syndicates makes it a point to see that every house erected in its territories for rental purposes is not only wired but equipped with a bell-ringing transformer.

socket sees before him a large variety of other small wares. The woman who wants a chafing dish or percolator sees a case full of desirable table devices. The portable lamps are not jumbled into a mass of glowing color, but each is separate and can be appreciated at its true worth. People who must give thought to the selection of fixtures have an opportunity to do so without the interruption of other customers, and this is true of prospective buyers of such appliances as need practical demonstration and extended selling talk.

RESULTS AT LOW COST

At the cost of \$26 a month, Will is now running a real store which attracts trade, pays a fair profit, and is helping him to build his contracting business.

"Bring in a Pan of Biscuits"

When the management of the municipal plant at Lake City, Minn., planned a series of demonstrations for educating local residents in the use of electricity for cooking, practical demonstrations were in order. In the advertising which was run appeared the friendly invitation: "Bring in a pan of biscuits during the display and have the demonstrator bake them for you while you wait."



"Human-Interest Windows" Win Prizes in Lamp Window-Display Contest

*Second Prize, L. J. SEWELL,
Lehigh Valley Light & Power Company, Allentown, Pa.*

*Third Prize, L. E. RAGAN,
Rome (N. Y.) Gas, Electric Light & Power Company*

*First Prize, W. B. MCSPADDEN,
Bristol (Va.-Tenn.) Gas & Electric Company.*

*Fourth Prize, E. P. SAFFORD,
Denver Gas & Electric Light Company.*

*Fifth Prize, C. F. ROST,
Newark (N. J.) Electric Supply Company.*

Living models were featured in the first five prize-winning windows in the lamp-window display contest conducted by the National Lamp Works of the General Electric Company of Cleveland, Ohio. The idea of freshly typed messages on telegraph blanks filed so that the public might read won a Ford touring car as first prize. Besides the

educational value of the contest, the competitors reported that their displays produced tangible results in cash sales. The windows reproduced above were selected by the judges from among nearly 2000 window pictures submitted in the contest. The original list of 60 awards was supplemented with 21 honorable mentions and one special prize.

STORE EQUIPMENT AND STORE METHODS



How to Plan and Equip Your Store
—Systems Used in Successful
Merchandising



Concentrating the Customer's Attention

"When I meet a customer in our store," says an electric shop manager who owes his present job to his former success behind the counter, "I try to lead him to a clear space at the counter. We have several such spaces.

"If I am trying to sell a toaster I put one sample before the possible buyer. There is nothing else near it to distract his attention, and I can tell him all about that one appliance. If he asks to see something else I put the toaster away. Concentration of attention is the trick."

Corralling the Cash

By L. F. MANN

By way of developing his cash business one live-wire dealer has provided himself with a quantity of specially printed stamps representing all denominations of currency, and with each cash deal the customer is given a stamp to correspond with the amount of the purchase.

The individual who brings to the store at the end of three months stamps representing the greatest total purchases receives, absolutely free, \$10 worth of merchandise, being at liberty to choose from stock any article or articles he desires. Other smaller prizes are offered the next five.

Where at all possible to pay cash, customers have naturally done so in order to get a chance at the prizes, and it is reasonable to suppose that many large purchases went to this dealer which would otherwise have gone to a competitor, simply because of the substantial inducement offered.

The dealer believes that this actually had a tendency to get people in the habit of paying cash, for since that time his cash sales have been larger than ever before.



When a Window Is Broken

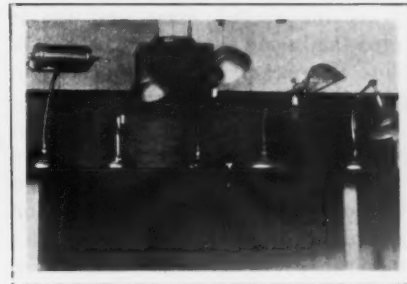
Windows are sometimes broken by wind, explosion, or other accident and are immediately boarded up awaiting the coming of the glazier. Clever advertisers make good use of such accidents by painting a timely sign upon the rough boarding. The temporary wooden shield always attracts the attention of passers-by and any timely announcement painted thereon is sure of catching every passing eye. Not long ago a window of the display room of the Dayton Power & Light Company was blown in, and as soon as the opening had been boarded up a sign was painted reading, "More than 10,000 Dayton Ladies Use Electric Irons—Why?" The result was quite as good as a display of the irons themselves would have been."

Pictures That Make the Store Walls Attractive

An idea that has added much to the effectiveness of a New York electric shop is the use of attractively framed photographs of electrical appliances in service. When sales efforts are being centered on electric irons the pictures used to decorate the walls show irons in use in homey surroundings. When the washing machine is placed in the limelight of concentrated selling the electric-iron pictures are replaced by photographs of the washer making a holiday of Monday. Many manufacturers furnish such pictures to dealers, either gratis or at a nominal charge. The pictures are arranged to harmonize with the special sales at all times, and besides adding to the artistic effect of the

showroom, they inject a personal element into the store by showing the goods in use in attractive interiors.

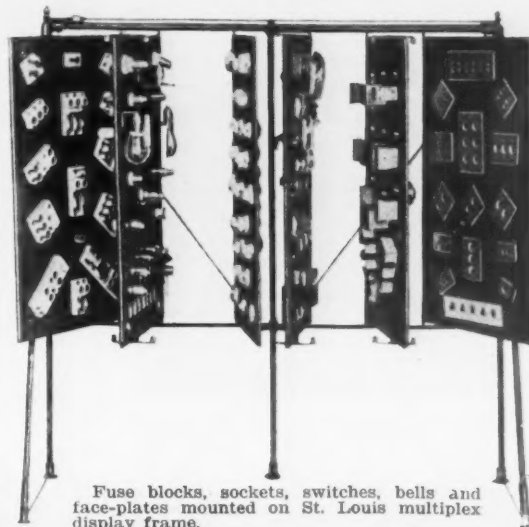
A Display Shelf for Hooded Desk Lamps



A New England fixture dealer has found that the sides of his show windows can be admirably utilized for the display of desk lamps and reflector units by providing simple shelves along the vertical surfaces. The picture shows how he made use of what would otherwise have been waste space.

"It Saves Answering Questions"

"By mounting samples of our various lines of fuse-plugs, sockets, switches, and porcelain parts on swinging-frame panels," explains a St. Louis dealer, "we save time for both the customer and ourselves in finding out just what the customer wants. With these samples on display he quickly finds the article he is in search of—or perhaps one better suited to his purpose—and can point it out to our clerk. This method of mounting samples in full view of visitors also saves us much unnecessary loss of time in opening original packages and disturbing stock."



Fuse blocks, sockets, switches, bells and face-plates mounted on St. Louis multiplex display frame.

Displaying Goods in a Picture Frame

An idea by no means new but very effective is to display goods to which particular attention is desired within a picture frame. Take a box, remove the cover, place with the open side toward the window glass, and line or drape the inside with velour of a dark color. Across the top of the box, on the side toward the window, arrange several lin-o-lite units in such position that they will illuminate the interior of the box at high intensity. Arrange the goods within the box—only two or three items at most—and place a picture frame in front. The effect will be similar to a "still life" picture of the goods.

Window Appliance Outlets

Every electric shop window should be so equipped that a number of electrical appliances may be operated in it simultaneously. In one New York electric shop the window space is separated from the main store by means of curtains, and on the store side of the window, just below the floor-level of the display space a row of screw-plug flush receptacles has been installed. Each appliance on display is supplied from one of the receptacles, and as the socket covers harmonize with the room decorations, the arrangement presents a neat appearance, whatever number of outlets are in use.

Handling the Corner Window Display



An effective use of a corner window for flashlight display is pictured above. Although, with the cut outs furnished by the manufacturer, the Interstate Electric Novelty Company, Brooklyn, N. Y., the actual cost of the set-up was not great, the impression of mass and solidarity is obtained through good grouping.

Ruby Lamps in Store Decoration

A novelty in store decorations was effected by the Merchants' Heat & Light Company, Indianapolis, the other day, with the help of some old



Ruby lamps in opal globes on ornamental-post standards, added to the decorative effect in this salesroom.

ornamental lighting posts. Ruby lamps were inserted in the opal balls on the posts which had been set up temporarily throughout the sales room, and so much attention did this novel lighting arouse among local merchants that Sales Manager MacGregor has started a special campaign to light other merchants' stores in the same way.

Don't Fail to Use Showroom Cards

The value of effective showroom cards that help answer customers' questions was emphasized by A. B. Wollaber, district agent of the Southern California Edison Company, Los Angeles, in a recent article in *Edison Current Topics*, issued by the Los Angeles company.

Careful study, declared Mr. Wollaber, should be given to the effect that the showroom has on the customer. As an instance of the value of showroom arrangement he cited an experience of his own.

His showroom in Santa Monica had given special attention to the display of electric ranges, and while the goods had been arranged in a way that seemed pleasing, still the customers failed to stop to examine them. A little study showed, however, the reason. For years the company had been exhibiting gas ranges,

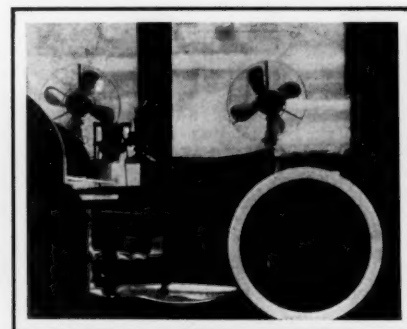
and there was nothing in the showroom to indicate that the exhibits there were electric. The problem was solved by placing a few cards marked "The electric range, the modern method of cooking" about the room. Since that time the ranges have attracted attention and it has been necessary to keep a salesman in that part of the room most of the time.

The showroom employee, Mr. Wollaber points out, should be thoroughly familiar with the goods. When an employee has to refer to a catalog or another salesman a bad impression is created with the patron.

Dealer's Handy Method of Filing Current Price Quotations

The man who does the buying for the Protective Electric Supply Company, Ft. Wayne, Ind., has a scheme of his own for filing price quotations. On a shelf beneath a table that sits just back of his chair he has a row of twenty-four sheet-metal compartments which are open at the front. Each compartment is large enough to contain a loose-leaf cardboard folder of standard letter size. The compartments are lettered. On the end of the roll-top desk is a typed sheet which acts as a key to this file.

When the buyer wishes to look up a quotation from a firm he consults the key; opposite the firm's name he may find I-18, indicating that the quotation is on the eighteenth sheet of the folder in compartment I. With



Letters containing quotations are filed in the compartments shown within the circle, handy to the buyer's desk.

this system the buyer can himself look up quotations more quickly than he could push a buzzer and have some office boy get the required letter from the general file.

"Work It Yourself from the Sidewalk"

Displays of motor-driven appliances or lighting equipment can be made very effective by installing a push button in a conspicuous location *outside*



A push-button mounted outside the window entices the passer-by to "make the wheels go round."

the display window so that passers-by may operate the display from the sidewalk. Appliances using a comparatively small amount of current can be operated from an ordinary push button, while those requiring more current may need to be controlled through a relay.

This idea was utilized by the Athens (Ga.) Railway & Electric Company in connection with a display of suction sweepers. One of the sweepers, mounted upon a pedestal in the center of the window and close to the glass, was connected to circuit through the out-of-doors push button, and dozens of passers gratified their curiosity by giving themselves an auto-demonstration long after the store was closed. Other dealers have arranged to light

their stores in the same way so that late passers-by can inspect window displays and store interiors.

Saving Cash in the Electric Shop

In the face of rising costs, the necessity for checking needless waste of every kind is constantly becoming more urgent. Among a number of hints recently issued to employees of the Public Service Company of Northern Illinois, G. R. Jones, purchasing agent, points out many ways of increasing economy in handling electrical goods.

"In the display room," writes Mr. Jones, "batteries should be placed only in the sample flashlight cases intended for customers to operate. Flashlights stored in our show cases should not contain batteries, as these deteriorate very quickly, especially in closed-in and lighted show cases.

"We should see that display articles finished in copper or nickel, such as percolators, chafing dishes, water heaters, etc., are not thrown away merely because they are tarnished, because they can be refinished by the manufacturer, or by a plating company at small cost, and sold for new.

"This applies also to fixtures and sockets, whether on display or returned to the storeroom. Stock fixtures and portable lamps should be kept wrapped up. Fan motors during the winter must always be wrapped to avoid discoloration from tarnish and dust."

Making Empty Spaces Draw Sales

The manager of an electric shop had just set a lithographed card full of new snap-sockets on his counter. Then he removed two of the sockets from the holders.

"It helps sell 'em," he explained to an inquiring visitor.

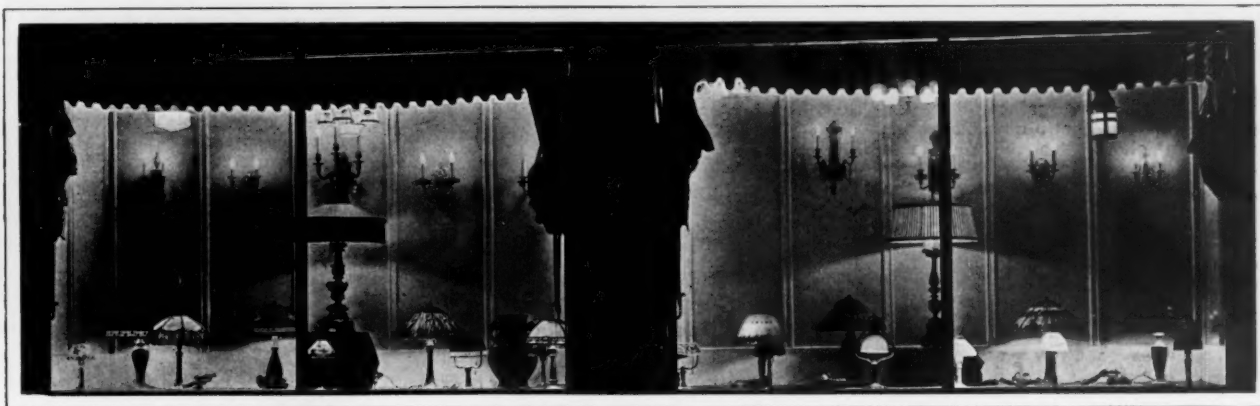
"Suppose you came in and saw the sign on that card stating that this novelty is a fast seller and then noted that the card was full of unsold sockets. Would you feel any buying impulse? Not much.

"However, if we set the stage to match our lines, sales on that plug will start right away. With two or three plugs missing from the card it looks as if others had bought and you feel much more like following suit than you do like buying the first sample."

Telephone Set for Window Demonstration

Several New York City shops are using a telephonic device that draws and holds interest in their window demonstrations. A loud-speaking receiver with megaphone is mounted outside of the window and the demonstrator explains his work by the use of a chest transmitter. The stores mentioned are using the device in connection with demonstrations of non-electrical goods. The electrical shop that puts in such an outfit can make a valuable talking point of the convenience made possible by electricity.

Wall Board Used as Background for Fixture Window Displays



The effect of a well-chosen background for a window display is shown in this lamp and fixture window of the Robertson-Cataract Electric Company of Buffalo, N. Y. Beaver board is mounted in the form of permanent partitions and, as painted, provides an attractive display surface. Such wall-board material comes in thin sheets of various sizes, and besides being cheaper than wood, is available in shapes in which lumber would be out of the question. The material has good working qualities, is easily cut with a fine-tooth saw, is light but tough, and does not crack or chip.

How the School Children of Joliet, Ill., Raised Funds for a Great Electric Flag

By J. H. RILEY

A BOY in the grade school at Joliet, Ill., the son of a local newspaper man, conceived the idea that with the present sentiment of the people of the country in regard to patriotism and preparedness, it would be an excellent idea to erect an immense electric flag sign in Joliet. The idea was presented to the editor of the newspaper by the boy's father, and was immediately given considerable publicity in its columns and the raising of sufficient money to purchase, erect and maintain such a sign was put up to the school children.

The scheme finally devised was to have a small button made up bearing a flag and the legend "Help the Joliet Children Raise the Flag." The buttons were to be distributed among the school children, who were to dispose of them at the price of ten cents each. A general committee was also appointed, consisting of some of the

prominent business men of the city, who divided themselves into sub-committees on purchase, site, finance, etc.

CO-OPERATION OF TEACHING STAFF MADE PLAN SUCCESSFUL

The co-operation of all the school principals and teachers was then se-

Then Joliet" in 4 ft. letters. They also made a contract for the erection, maintenance and furnishing of current for this sign, which was to burn from dusk to midnight each night in the week for a period of two years.

The flag was dedicated one afternoon in the presence of the school children of the city, and speeches were made by prominent business men. The display makes a most attractive appearance at night. The letters "America First" come out first and hold for a minute, then go out. Next follow the words "Then Joliet." At the same time the flag has a continuous waving effect. In conclusion it may be added that this plan might not have been a success had it not been for the co-operation of the principals and school teachers in working with the committee, and the publicity given the idea through the columns of the newspaper.



The schoolchildren's 38-ft. electric flag on Joliet's city hall

Salesman, Tote Your Vacuum Sweeper with You

By CARL H. FELKER

The value of having vacuum-cleaner salesmen carry a demonstrating machine with them was shown in a recent campaign at Columbus, Ohio. Wherever the men went they carried cleaners, always in the open. On street cars going to and from work and in the restaurants at lunch time, the very presence of the cleaners gave the salesmen a "conversation opener." It permitted them to talk to men and women about their household problems and the relation of these problems to the electric vacuum cleaner. Valuable prospects were gained by this method. In fact, one salesman sold a cleaner to a man on a street car. He attributed the sale to the fact that by carrying the cleaner he advertised his business. It pays to advertise cleaners by having the men carry them wherever they are on duty.



cured, and the buttons purchased by the finance committee. Each principal was furnished buttons to the number of four for each child in his school, and the teachers were held responsible by the principal for turning in the money after all of the buttons had been disposed of.

The children met with much success in selling these buttons, as it was unlikely that anyone would refuse a child the small sum of 10 cents, and within a few days the majority of the citizens of the whole city were wearing flag buttons.

Before the necessary funds were subscribed the committee had such confidence in this procedure of raising the money that they met with the local electric light company and secured a price for a flag sign 32 ft. in height and 38 ft. in width, consisting of a large 555-lamp electric flag with the wording underneath "America First—

Catch-Phrase Signs That Sell Appliances

By RAIMUND W. WALES

Manager Appliance Department, Waterloo, (Iowa), Electrical Supply Company.

To each of our appliances we attach a little hand-painted sign, 11 in. by 7.5 in., which carries some catchy phrase about the article. On our vacuum cleaners, for example, we use such as the following: "I have an affinity for dirt"—"I can cure Broomitis"—"DUST thou not need me?"

These examples show the type of signs on our washing machines: "I'm the only laundress you don't have to feed."—"I Woo the Weekly Wash With Watts."—"Let me make WASHDAY a HOLIDAY for you."

We change these signs every day or two, and they have attracted much interest. We often hear our signs quoted about town. Recently we put several electric cleaners in our window, and we had a crowd all day, people stopping to read the signs on each machine.



Making the Layout Match the House

Estimating the Wiring for a Large Residence

By J. W. HOOLEY



"THERE'S a palace of a home," remarked Contractor Fred Howe, glancing out of the Pullman window. "Some banker's place, probably."

"Yes, and I'll bet the electrical work in it caused a heap of argument before it was finished," and Tom Maxwell grinned reminiscently. Somehow their conversation usually seemed to turn to "shop" talk, and this time it was inevitable—they were bound for the annual state convention of electrical contractors.

"You ought to know," encouraged Howe. "They tell me you had some experience in that line when you nailed that Mead job in Bayville, over the heads of four local bidders. How did you get away with it?"

"Personal contact, in the first place. We have done all our banking business with the First National there for years, and you can bet I've made it a point to know all the officials. So when the president, Mr. Mead, decided to build in Bayville

he asked if I would care to figure on the electrical work. He explained that four local men were to submit figures to the architect.

"We have done so much out-of-town work that jobs away from home don't bother our boys at all, so I knew the local contractors had nothing on us there, and I thanked Mr. Mead for the opportunity to submit our bid.

"I turned our set of plans and specifications over to our estimator and the next day he brought me the whole business. He had his figures in shape but they looked queer to him, and we went over the data together. In the first place, the house was to cost about \$75,000 and the electrical layout as specified only figured between \$600 and \$700.

"The plans showed a fireproof job throughout—yet flexible armored cable was specified. This was only one of the many code violations and I wrote Mr. Mead that I could not submit figures until I had talked with him about the work.

"When I called on the owner I didn't waste any time or words. I told him that besides violating the code, the layout made no provision for an intercommunicating phone system for three or four way switches or for floor receptacles. I explained that the outlets that were specified were located without consideration for convenience or good practice.

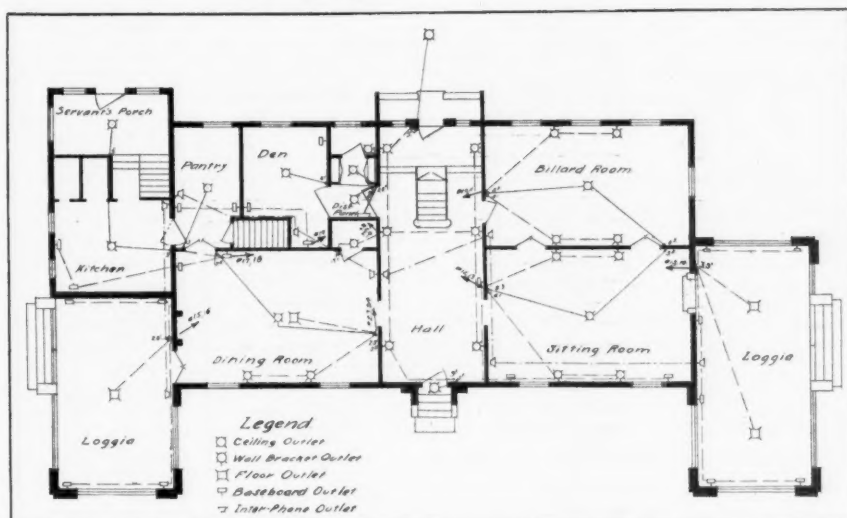
"As an example I showed him one of the main rooms which was arranged with two entrances and only one switch. By the use of three-way switch control at each entrance, a person coming into the room could light up ahead of him, and put out all lights on leaving at the other end.

"Not one of his closets had been provided with a light, although the cost for putting that convenience in all of them would have been an almost negligible fraction of the total figure.

"That is interesting," said Mr. Mead after I had finished my detailed criticism, 'because the architect said in the first place that the electrical work might cost in the neighborhood of \$5000. But one of our local friends said he could do the work at a figure under a thousand and I let it go at that. Now suppose you go over the thing with the architect and his electrical engineer and when you have modified the specifications and made a new estimate, tell your story to Mrs. Mead and me.'

"The architect was a fine fellow to work with and after an afternoon in his office we had all our dope for Mr. and Mrs. Mead. Armed with the new plans and estimate sheets, the architect outlined the remodeled job for them.

"Our layout started in with a main switchboard in the cellar of the house and all feeders ran from this point, so that the house, garage, grounds lights



Three-way switches were used in all rooms having more than one entrance so that a person coming into the room can light up ahead of him and put out all lights on leaving at the other door.

and pumping house were all controlled from this central point. All feeds were run underground with conduit and lead-covered cable and a separate feed was used for each supply. Three-way switches were used wherever they would add to the convenience, and base receptacles and plugs were provided in every room.

"The intercommunicating phone system included every room and 2 spare stations were arranged for, in case it should be desired later to include the garage and pump-house.

"The Meads were delighted with the

ideas as the architect had presented them, but Mr. Mead wanted to know about the added cost.

"The costs have been worked out in a way that will appeal to you as a banker, Mr. Mead," said the architect. "Here are the sheets Mr. Maxwell has prepared. Sheet No. 1 shows all the circuit work in detail with itemized prices for labor and material. Sheet No. 2 shows all feeders and mains treated the same way. The telephone and bell work is detailed on Sheet No. 3, and the totals are tabulated on No. 4. You will note that he has charged

in 10 per cent for overhead and administration and 10 per cent for profit. He has put his whole story on paper."

"I guess that's all," said Mr. Mead, "except drawing up a contract for Mr. Maxwell. It's his job!"

"That's the story, Fred, all but the sequel."

"What was that—slow pay?"

"Not so you could notice it! Another Bayville job. The National's vice-president is building out there and gave us the electrical work, without competition, just on Mr. Mead's recommendation."

Scale...1/4" = 1'		Architect... <i>Maxwell</i>		ESTIMATE		Sheet No. <u>1</u>				
Name... <i>R. J. Mead</i>		Est. No. <u>635</u>								
FLOOR	C. O.	S. O.	S. W.	BASE REC.	PLUG FLOOR	CKT.	PANEL	1/2" CON.	3/4" CON.	
GARAGE	3			X	X	12		100		
3	8	4	9	X		2		600		
4	10	14	20	20		12	1	1000	200	
1	14	18	24	18	4	24	1	1000	300	
Bell	6	4	7	3		6	1	500	100	
TOTAL	31	44	67	45	4	45	3	4500	700	
ITEM	QUANTITY	DESCRIPTION				MATERIAL				LABOR
current/line	153	wired 3000 - 20/50				36	60		91.50	
"	71	Round Cords 10/10				7	10		7.50	
"	107	Run of Pipe 10/10				10	70		10.70	
"	4	available floor plugs 30/10				14	20		4.00	
"	25	Plaster supports 20/25				14	0		9.50	
"	40	1/2" studs .06/05				24	0		24.00	
"	100	Locknuts & Washers .06				24	00			
"	4300	ft 1/2" gal. conduit 06/10				2	70	00	15.00	
"	170	ft 3/4" " 15/10				64	00		50.00	
"	6000	ft #14 supply wire 03/11				110	00		60.00	
"	200	ft #14 panel " 02/11				40	00		20.00	
"	60	Push Buttons & Plates 100/50				60	00		30.00	
"	45	Base, Receptacles & Plates 100/50				45	00		22.50	
"		allow Pipe, plugs, etc.				10	00			
"						77	20		7.00	

ESTIMATE				
Name: <i>R. J. Mead</i>		Sheet No. <i>2</i>		
Est. No. <i>635</i>				
ITEM	QUANTITY	DESCRIPTION	MATERIAL	LABOR
15	15	20 pte show 200/500	50	90
Plumington 500	500	ft 1/2" Cond. 10/10	50	50
50	50	1/2" L & B .05	400	
30	30	1/2" " .25	150	
600	600	ft 3/4" cond. cable 25/10	15000	60
			15150	200
<i>Bell Systems</i>				
2	2	14 spk. intercom 20/50	50	100
30	30	wired 3000 20/50	600	600
25	25	push buttons & plates 100/50	2500	1350
1000	1000	ft 1/2" Cond. 25/10	8000	1000
50	50	ft 1/2" Cond. 10/10	500	500
			14150	13450
<i>Special Control and Pumping Board with 2 pte of Storage Batteries for full size house systems</i>				
			100	50

ESTIMATE				
Name: <i>R. J. Mead</i>		Sheet No. <i>2</i>		
Est. No. <i>635</i>				
ITEM	QUANTITY	DESCRIPTION	MATERIAL	LABOR
Main	70	ft 2 1/2" Cond. 30/10	2100	1700
feed	3	2 1/2" EL 1.50	450	
House	6	2 1/2" L & B .25	150	
light	10	pipe hangers 50/25	500	250
230	230	ft 4 1/2" L & B 45/05	10250	1150
Garage	100	ft 3 1/4" Cond. 05/05	500	500
feed	220	ft 10 1/2" lead 05/03	1100	660
2	2	3 1/4" L & B .07	14	
Pump house	200	ft 1 1/2" Cond. 10/10	5000	2000
House	2	ft 1" L & B 05/05/100	1000	200
450	450	ft #6 L & B 10/10	4500	1350
Ground	300	ft 1" Cond. 10/10	3000	3000
lights	600	ft #8 L & B 05/03	6000	1800
		allow for extra fittings in room conduct	1500	
			32760	12960

ESTIMATE				
Name: <i>R. J. Mead</i>		Sheet No. <i>4</i>		
Est. No. <i>635</i>				
ITEM	QUANTITY	DESCRIPTION	MATERIAL	LABOR
TOTAL SHEET				
Sheet	1	All circuit work	77200	7800
"	2	Mains & feeders	35260	12960
"	3	Phone system	75150	2600
"	3	Bell system	14600	13450
"	3	1. Special Board & Batteries	20000	5000
"	3	2. Panels - 50 circuits	10000	5000
"	3	1. Main Board	24220	13500
"	3	2. Pumping Board with 2 pte of Storage Batteries for full size house systems	100	50
"	3	Board for Main & Bell for extra - 2 trips	1000	
"	3	cost	30750	
"	3	overhead 10%	3075	
"	3	Profit 10%	4371	
			14000	

Sheet No. 1 shows all the circuit work in detail with itemized prices for labor and material. Sheet No. 2 shows all feeders and mains in the same way. The telephone and bell work is detailed on No. 3 and the totals are tabulated on No. 4.

Six Capital Hunches from a Small-Town Wiring Campaign

How the Rome (N. Y.) Electric Company Advertised Its House-Wiring Offer, Demonstrated Its Dirtless Method, Sold Appliances, and Won the Customer's Satisfaction

SEVERAL novel departures marked the house-wiring campaign undertaken not long ago by the Rome (N. Y.) Gas, Electric Light & Power Company, in the course of which there were secured contracts for 225 out of a total of 480 unwired residences.

1. On the night before the first announcements in the newspapers, a tag, describing the advantages of electric service, was tied on the front door of each unwired house in the city. These tags were also fastened to the lower branches of trees, and on gateposts and on fences along the principal streets, until the town was virtually "papered" with these striking colored sheets.

2. As each house was wired, a newspaper ad was run showing a picture of the house and a reproduction of a letter from the owner expressing his satisfaction. In preparing the letters, each owner was asked to make up the letter before the completion of the job, so that electrotypes could be prepared in advance. No letters were finally released without the approval of the writer, but by having the letter and photograph of the house reproduced in advance it was possible to run the ad telling of the job on the day following its completion.

3. In wiring the homes only one

ESTIMATE SHEET									
ESTIMATE ON HOUSE WIRING									
LOCATION	1	2	3	4	5	6	7	8	REMARKS
Front									
Back									
Living Room									
Bed Room									
Kitchen									
Bath									
Attic									
Basement									
Other									
Notes									
By									
Check									
Date									
Address									
Subscribed									
Total Cost, \$									

A copy of the estimate was left with each prospect to prevent the possibility of future misunderstandings.



Photo by C. B. Howland.
RESIDENCE OF L. S. SPEAR, 200 W. GARDEN STREET

Rome, N. Y., November 16th, 1916

Mr. A. B. Morton, Sup't.,
The Rome Gas, Electric Lt. & Power Co.,
Rome, N. Y.

My dear Mr. Morton:—

The only thing that has kept me from putting in electric light was the seeming impossibility of getting a hard and fast price on the entire job.

Your House Wiring offer changed all this and gave every assurance of giving me just what I wanted for a fixed price that I could afford.

I am greatly pleased with the work and the way your company has handled the business, and feel that your campaign was a distinct benefit to the community.

Very truly yours,

L. S. Spear.

As each wiring job was completed, a newspaper ad was run showing a picture of the house and a letter from its owner. These letters and cuts were made ready in advance, but each was "released" with the writer's permission on the day following the completion of the job.

room was worked upon at a time. The first step in every case was to run in the service, and as soon as one room was completely wired the lights were installed ready for use and the workmen moved to the next room. No meters were installed until jobs were completed and the customers were given free use of current in the rooms as soon as the work was finished. In this way households were disturbed to a minimum extent, and in one or two cases afternoon parties were actually held in newly-wired lower rooms while the workmen were still busy in other parts of the house.

4. A vacuum cleaner was delivered to each house being wired and each evening on knocking off the men cleaned up the room in which they had been working, thus justifying their reputations as "dirtless workmen."

5. When the workmen took away their tools at the completion of a job, they made a point of leaving the vacuum cleaner behind them. A few days later a salesman was sent to the house for the cleaner. If he found that the family had been using the machine he offered to leave it for another week as an accommodation. At the end of that time the new customer was offered the cleaner at an attractive price. As a result of this scheme forty-eight cleaners were sold during the campaign.

6. At the first call upon a wiring prospect, estimates were made out in duplicate, one copy being left with the prospect. In giving prices on fixtures, figures were given on sets, and also on the separate pieces of a set, so that a customer was free to choose any one piece that pleased him without extra cost.

A part of the success of the campaign may also be attributed to the tactfully created impression that electricity in the home is the correct thing—in fact, a feature to be expected in every modern house.

Hooking Up the Wired Home

By S. C. LLOYD

If a central station salesman is willing to work in the evenings, the house which is wired, but which is not using electric service, presents a real opportunity for him.

In Ohio one salesman has been "making a killing" on this class of business by getting the service crew to connect up one wired house in his territory each day, calling at that house in the evening to close the deal. Of course he takes a lamp with him—a 75-watt gas-filled lamp has been found best. He places this in a socket, turns the switch, floods a whole room with light, and puts the other illuminants to shame. He leaves it turned on for a while and talks the advantages of electric service. Then he turns it off and talks "eye saving." The effect, he says, is wonderful. His sales record proves, too, that it has the effect of putting names on lighting contracts.



Electrical Merchandising

THE MONTHLY MAGAZINE OF THE ELECTRICAL TRADE

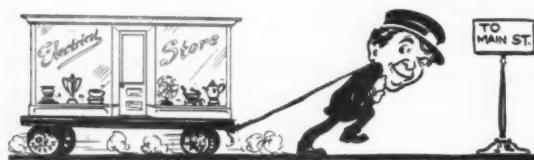
Volume 17—February, 1917—Number 2

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Co-operative Estimating

AS an example of the constructive work that contractors' associations can do, the efforts of the Electrical Contractors' Association of Wisconsin deserve mention. The heads of that body found that the mill men of Milwaukee had discovered a way to reduce the cost of estimating. So at the contractors' annual meeting the mill men were asked to tell the contractors about the plan. The contractors learned that the mill men had reduced the cost of estimating 66 per cent by agreeing to have all estimating work done by a central estimating bureau. The bureau does the work better, does it more thoroughly and does it cheaper than the individual members could do it separately.

Each member, of course, puts his own prices on the estimates of material worked out by the bureau, so that the bidding is done on a competitive basis. Whatever the conclusions concerning this particular proposal, the Wisconsin contractors have shown sound wisdom in using their association as a forum for discussion of methods of reducing the cost of doing business.



Using the Paying Street

IN order to hold its franchise, a certain New York street railway company has been operating an extrolley car over a certain side street a certain number of times daily. For years the daily receipts of the car averaged 30 cents. One day a new man was put on the car. His first day's receipts were 25 cents, and his second day netted 30 cents. The third day, however, dealt a knock-out to the law of averages. He turned in \$51.25. The superintendent demanded an explanation. "Business wasn't any good on that side street," replied the new man, "so I took the car over on to Broadway."

The best decorated show windows in the world cannot draw trade from a dead street. Running at a loss just for the sake of running, leads a store to no uncertain destination. If your store is on a side street, find a young conductor who will "take it over on Broadway," where there is something doing. Windows get dirty faster on a busy street, but it's only when they get glove marks, breath spots and nose circles on the outside that they justify their cost.

Testing Out the Public

ONE way to know in advance whether a piece of equipment will stand the test of use, is to let your employees try it. Public utility managers say that rates which cause complaint among their own employees are rates which need general adjustment. In the same way, men with experience in introducing electric ranges tell us that more sales can be made if that particular section of the public, the company's employees themselves, are thoroughly sold on the electric ranges. The best method of making such a preliminary test of public opinion is dependent on local conditions. It does seem practicable, however, to have the meter reader, the demonstrator, the salesman, and the installer from the same company, all tell the same story. In how many cases do they? It is not necessarily an intent to tell different stories, but a lack of knowledge on the part of each which prevents them.



The Maid Will Help

NOTHING should be more encouraging to the man who plans a vacuum-cleaner campaign for the coming month than to remember that the average servant maid will be "agin it" till she tries it with her own two hands. Either she will be afraid of it or she will line up with the famous farmer and maintain "Tain't possible!" But so it is with every other kind of labor-saving apparatus for the home.

And why is this encouraging? Because there is nothing in the world so wonderful to any one of us as the thing that we believed impossible. Conversion brings enthusiasm and the servant-skeptic, once induced to try an electric sweeper on a rug she has been toiling over with a broom, sees what happens and is invariably enthusiastic. Convert the maid and she will help you sell it to the mistress, and will advertise you through the neighborhood. It makes an opportunity in every home.

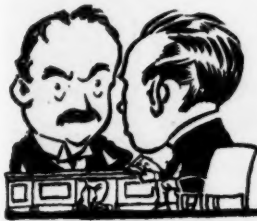
When Edison Punched the Clock

THE man who can succeed by working few hours is to be congratulated, but not imitated. The best—and for most of us the only—recipe for success is hard work.

Thomas A. Edison, though seventy years old this month, world famous, and rich, as the world counts wealth, to-day works harder and longer than any other reader of this magazine. One of the "old man's" time cards which he actually punched showed that he was on the job a little matter of ninety-five hours and forty-five minutes during a single typical week. Any man who will work like that will succeed—not in the same manner as Edison, but to the same degree.

Try it.

IDEAS FOR THE MAN WHO SELLS



Plans, Schemes and
Methods to Increase
Sales of Electrical
Goods



\$1,300 in House-Wiring Business at Cost of \$3.50

A mail campaign for house-wiring business that cost \$3.50 and secured \$1,300 worth of business was conducted this winter by the Minneapolis (Minn.) General Electric Company.

After a selection of sixty good prospects who could well afford the necessary expenditure, the company sent out a letter featuring a time payment plan and offering to submit a careful estimate without obligation to the house owner.

This letter was followed by a second which summed up the advantages of electric service and inclosed a stamped return postcard for the prospect's convenience. The wiring business which resulted was turned over to the contractors by the company and served to increase the central station's annual revenue by \$325.

Water Tank, Flood-lighted After Dark

The water tank of the New Haven (Conn.) Dairy Company has been concealed in a falsework which is built



The only water-filled milk bottle of the New Haven Dairy Company is this big flood-lighted water tank and sign.

in the shape of a huge milk bottle. At night the tank is flood-lighted by two projectors, each equipped with a 500-watt tungsten lamp.

"Call Up These People Who Use Our Washing Machines"

In an electric-washer campaign at Youngstown, Ohio, the company offered to give an iron with each washing machine sold. Its advertisement carried the announcement in headlines, then gave the names, addresses and telephone numbers of many washing-machine owners. Prospective purchasers were invited to call up the owners to see if they were satisfied. This campaign sold thirty-two machines, and twenty-seven of these thirty-two sales were traceable to the advertising.

How One Dealer Writes His Ads

The task of preparing advertisements which present, in a readable manner, the features of the appliances they are designed to exploit, is a difficult one for many dealers. Some think that two or three abstract statements are sufficient, while others make their task burdensome by attempting to duplicate Spencer's or Bacon's essays. One dealer's plan for outlining the points to be covered by an advertisement is this:

First he assumes the role of a man to whom he is going to direct his appeal, and, as such, he thinks of all the points of merit that the device in question should possess to make it thoroughly desirable. He writes these all down on a piece of paper, then, with the device before him, checks off the features he has listed which it possesses. In the points checked he then has the outline for the advertisement.

This dealer prepares some most effective advertising, and he declares that this plan has been found simple and practicable.

A Self-Cooked Electric Dinner

A novelty in the line of Rotary Club dinners was arranged by the Massillon, Ohio, branch of that organization. Each couple present at the affair was supplied with an electric grill, and electric percolators and chafing dishes were conveniently located on the tables. The guests prepared their own dinners, and incidentally learned something of the convenience and pleasure of electric cooking. The "juice" was furnished by the Massillon Electric & Gas Company.

Daily Buying for Special Sales

"We never buy on the spur of the moment," says Dorsey R. Smith of the Consolidated Gas, Electric Light & Power Company of Baltimore, Md.

"We often hold sales of items like table lamps—items upon which there is no established price. Most men, when they go into a sale of that sort, buy a big stock. We do not. We buy moderately, but I stipulate that I can have whatever quantity may be needed at the same price. Once we started a sale on a special \$1.98 lamp with an initial order of fifty. I reordered by telegraph day by day till the sale ended. And we had the cash in hand before the manufacturer had made out his bill to us."

Did You Get One of Our Green Dollar Bills?

We swap them for those better hunches and business boosting systems that have helped their authors.

If you have already received one of those excellent green-backed steel engravings on silk sprinkled bond, come again. They are fully guaranteed—ask the man who owns one.

If you have not sent us any of your ideas as yet, reach for the pen and paper this minute, entrap the inspiration and add another grain of pep to the magazine we both read.





Washing Machine Prospects from Want Ads

By MRS. M. M. RITER

Demonstrator, Lehigh Valley Light & Power Company, Allentown, Pa.

Each morning we go over the want ads in the newspapers. Wherever we see a heading "Laundress Wanted" we take down the name and address of the advertiser as a washing machine prospect. Out of a list of fifty such prospects we have sold thirty machines, and have succeeded in wiring eleven homes.

Advertising Electric Vehicles by Telegraph

R. M. Griffith, manager of the Electric Storage Battery Service Company, Tulsa, Okla., not long ago inaugurated an advertising campaign, the feature of which consisted in sending individual bona fide telegrams to the homes of some 100 well-to-do citizens of Tulsa. Mr. Griffith declares that this stunt produced more sales than any other local advertising effort he has yet tried. The novelty of the method impressed the names of the makes of electric vehicles and storage batteries he had to sell on the people receiving the messages, for any man receiving such a telegram invariably read it clear through.

Matches that Exploit the "Matchless" Way in Cooking

The North Shore Electric Light & Power Company, Port Jefferson, N. Y., is distributing souvenir safety matches in paper covers on which are printed the statements, "You won't need these matches if you cook electrically" and "Use our service—it's matchless."

Selling Vacuum Cleaners to Apartment Houses

More and more apartment houses are equipping their buildings with portable vacuum cleaners, which are loaned to the tenants on certain days of each week. There are, however, a large number of houses not now equipped and the live salesman can put up a very attractive argument in favor of the adoption of such machines.

"When a possible tenant inquires about the service in one of our apartments," said a New York renting agent recently, "the statement that the free use of a vacuum cleaner every Tuesday is included always makes a favorable impression. The portable machines, being used on the tenants' own circuits, cost the house owner nothing to operate, and in the case of an old house the portable machines do not carry an installation cost as a stationary machine does."

In some localities the furnishing of electric washing machines has met with similar success.

Oklahoma Dealer Features Old and New in Housework



These windows show the ease that electricity has brought into domestic processes, from coffee-making to housecleaning. The Peabody Electric Company of Muskogee, Okla., which made the exhibit, declares that the display not only attracted public attention, but also sold goods.



At night two 100-watt lamps behind the transparent disc give this sign great "pulling power."

Distinctive Restaurant Sign

Unusual "pulling power" is given to the electric sign used by a chain of Boston (Mass.) restaurants by designing the raised face to picture a coffee cup in translucent glass, as shown in the accompanying halftone. An excellent night effect is obtained with the use of two 100-watt lamps.

Color Changing Window an Eye-Catcher

A window display which is alternately flooded with red and blue light has been used with success by the Momence (Ill.) Utilities Company. On each side of the window is mounted a bank of twenty lamps—ten reds and ten blues. All of the red lamps are connected on one circuit, which includes a reactance coil. Similarly the other circuit which supplies energy to the blue lamps includes a reactance coil.

A single movable core is mounted to slide in and out of the coils in such a way that when it is fully inserted in the "red" coil the other end just clears the "blue" coil. By means of an oscillating fan the core is moved back and forth, first dimming the blue lamps as it enters the "blue" coil, and next moving so as to lower the intensity of the red bulbs. The resulting effect is a continual change from one color to the other, and attention is drawn to the window from points a block or more away. This lighting scheme takes up little room and lends itself readily to any form of display to which it is desired to draw attention.

Mysterious Hand Arouses Interest In Window

M. C. Moins of the Universal Electrical Appliance Company of Duluth, Minn., writes in the February *National Mazda Stimulator* of a mystery window feature he originated, as follows:

"We loaded the wrist of a wax hand with a piece of soft iron and laid it flat on a piece of thick glass which covered a small box.

"Within the box, but concealed from view, was a powerful electro-magnet connected with a flasher which turned the current on and off. When the current was on, the hand would rise, and when the current was switched off, the hand fell."

Used as an attention-getter in a window with a good lamp display, the device was very successful.

Twelve Sound Suggestions for the Solicitor

Handy sales arguments, pointers to solicitors and general material of value to the man who brings the written name to the dotted line are contained in a booklet just issued by the Westinghouse Electric & Manufacturing Company, Pittsburgh, Pa.

A group of tactical points sometimes overlooked by canvassers is given on the fifth page of the booklet as follows:

"Always carry and leave a personal business card.

"A user of an iron is a first-class prospect for some other device.

"Spend half your call in explaining your device and the other half in getting the order signed.

"Close your sample case while making a demonstration. This concentrates attention on what you are showing.

"Don't mention price the first time asked—continue the demonstration.

"If asked a second time a sale is pretty sure—stick for the order.

"Make return calls in the evening if prospect wants to consult her husband—don't call the next day to see what he said—sell him yourself.

"Don't leave articles on trial—it means double or triple work. Sell outright with absolute guarantee.

"Rainy days are good days for industrial and apartment house calls, tailors, dentists and downtown—women don't want their rugs soiled.

"Always ask prospects if they are satisfied with the electric company's service.

"Turn in all complaints and see that they receive attention."

Street Car Advertising to Clear Stock

See at Once -
Our Bargain Tables filled with
Electric Cooking and Heating Appliances and Portable Lamps
Odd Lots and Samples used for display
Every Piece Guaranteed
THE EDISON ELECTRIC ILLUMINATING CO. OF BOSTON
39 BOYLSTON STREET

This is one of the car signs used by the Boston Edison Company to help dispose of its odd lots and display samples of appliances.

February Wiring Business

One Middle Western company operating in a town of 20,000 inhabitants, solved this problem of securing late winter wiring business last year by making things easier for the customer. As the manager put it, "We let down the bars in February. We took off all credit restrictions and for one month stopped asking the customary \$5 deposit to guarantee payment of bills. Only one man, who would not pay his back bills, was refused.

"During that month we closed seventy-nine residence electric service contracts, whereas in an ordinary February we usually got from seven to ten. Some of them, when we took them, did not look like very good pay. However we thought the experiment well worth a trial, and on looking at the books nearly a year after the experiment I find that we still have sixty of these customers. They are paying their bills, and in fact have paid us some \$500 since they were taken on. It paid us to let down the bars in February."

An Idea for the Range Demonstrator

The salesmanager for an electric lighting company in the Northwest has issued a challenge to any visitor to the demonstration room, to bring any article of food which cannot be cooked better on the electric range than on a stove burning wood, coal or gas. The articles are to be brought in on one of the two days per week on which demonstrations are given, and are cooked before the assemblage of visitors. Perhaps the greatest triumph and accompanying advertisement thus far has resulted in the success of the chef in roasting a ham in the oven so as to secure better results than by boiling.

Using "Yes" and "No" Cards in Housewiring Campaign

By A. L. SCOTT

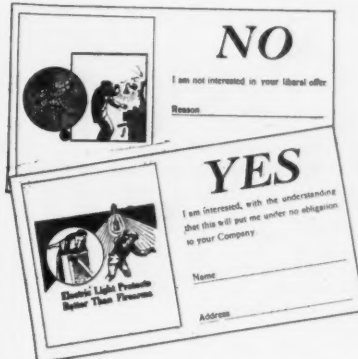
Sales Manager, Edison Electric Illuminating Company, Lebanon, Pa.

With a letter to housewiring prospects we sent out two post-cards and one stamp. One card was marked "YES" and carried space for name, address, etc., and the customer's signature on it indicated a willingness to have an estimate on wiring work submitted, without any obligation to the prospect. The other card marked "NO" gave space for the reason why the prospect was not interested.

We sent out letters and cards to 913 homes. In reply we received thirty-one "YES" cards and 134 "NO" cards. Altogether, however, we closed forty-two contracts from the list and in addition secured many excellent prospects from the "NO" cards. Examples of the reasons given for non-interest are:



"Not at this time," "Sickness," "See me in the spring," and "As soon as I clear mortgage."



These cards paved the way for forty-two house-wiring contracts in Lebanon, Pa.



HINTS FOR THE CONTRACTOR

Ideas on Estimating, Stock Keeping, Shop and Construction Methods, and Collections

Co-operative Estimating Saves Money in Milwaukee

At the January meeting of the Wisconsin Contractors' Association there was a rather unusual paper on the program. C. E. Flamboe, who is the manager of the Milwaukee Mill Bureau and who has nothing to do with electrical contracting, but who knows a great deal about co-operative estimating, talked to the association on the plan which a group of twelve Milwaukee mill men have been using to reduce their estimating cost. He told them how this bureau is operated and what its advantages are.

It is the duty of this bureau to work out from plans and specifications a detailed list of all the material needed for any job on which the twelve member concerns wish to bid. This data is then handed to all members and they, themselves, put their own prices on the various items of material. In this way the bidding is done on a competitive basis, but the actual labor of estimating is performed in one operation for all twelve companies.

This plan eliminates trouble which sometimes used to arise with architects, who were unwilling to provide twelve separate plans and specifications, in order to give all of the mill men an opportunity to bid. It also substitutes the work of one estimator for the work of twelve separate esti-

maters, and it provides each bidder with a more accurate set of figures upon which to base his bid than he could himself work out in the limited time he usually has for such jobs.

In discussing the advantages of the plan, William H. Schmidt, Jr., one of the members of the bureau, said it now costs him \$40 a month on the average for estimating which is done by the bureau. The saving which has been effected in his case through this plan may be appreciated from the fact that it formerly cost him \$125 to \$150 a month for estimating. The cost of the bureau to its other members ranges between \$25 and \$90 per month, depending upon the gross amount of business the bureau handles for them.

The recital of the details of this plan was eagerly received by the Wisconsin contractors, and it is probable that some similar plan may be worked out for estimating on wiring jobs in the Milwaukee territory.

Can the Contractor Profitably Take Jobs at Cost Plus 10 Per Cent?

The necessity for sound business methods in electrical contracting work was emphasized by a Seattle contractor in his address before the Washington Association of Electrical Contractors and Dealers in the following words:

"All of us make mistakes when figuring up estimates, and while such mistakes are to be regretted, and may mean an actual loss to us, we must not forget that the mistake is ours and not the customer's. We must do as we have agreed to do and give him the work to which he is entitled under the terms of our contract. The chances are that we will be more careful next time.

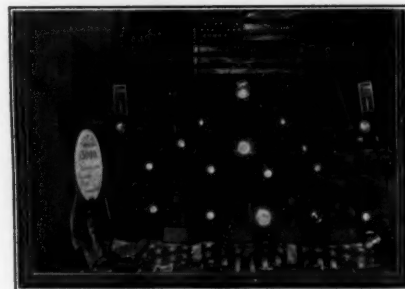
"On the other hand, if we decide to beat the customer by trying to make the job 'stand' our mistake and we get away with it, it is quite likely that we will take further chances on the next job in the hope that we can

repeat the performance, and thus get into a habit which makes of us crooked contractors and which sooner or later will put us in the down-and-out class, with claims to neither business sense nor respectability.

"A contractor who tells a prospective customer that he will do his work on the basis of invoiced cost of material and labor, plus 10 per cent, is promising the impossible. Electrical contractors cannot do work on any such basis and the only alternative, if we wish to avoid a loss, is to play the part of a crook and beat the customer by securing the issuance of false invoices or padding the payroll, or both. Such methods, I regret to say, have been practised in the past by some contractors, and the elimination of these methods will be a big step toward the ideal conditions we hope to attain."

Using the Material at Hand

In Bristol, Conn., the street on which H. McKinstry's store is located was torn up for repaving. Granite blocks were piled high on the sidewalk,



The repaving of the street on which this store is located in Bristol, Conn., gave its owner an idea for a novel window.

and traffic was choked. However, taking advantage of these conditions, which might have been viewed as obstructions by a less resourceful man, Mr. McKinstry erected in his window a fort built of paving blocks, with flash lamps projecting from the "gun holes."

Don't Hide Your Appliance Under a Bushel

"Small appliances should never be tucked away in some out-of-sight floor-level display case," so says a Brooklyn contractor of successful experience. "There are many electrical dealers, especially small ones (who are small for this reason) who seem to hide their stock away from the sight of customers who enter their stores. They bring



Paint Your Ladder Red!

By W. E. BAYARD

We formerly lost several good ladders every year. Not that people are dishonest, but when we left a ladder on a job over night we often failed to find it the next day. Finally we painted every one of our ladders bright red and the losses stopped. The same trick that makes identification easier makes swiping harder.

the stuff out only when a customer inquires about it.

"Place all such devices," he says, "where your customers cannot only see them, but also handle them. Perhaps your customer has seen one of these devices in the home of a friend and has made a mental note to buy one some time; how is he going to think of buying unless you keep these articles constantly in front of his eyes when he enters your store?"

A Perpetual Inventory Fixture Tag

A tag for fixtures which makes it easy to keep the record of stock up to date at all times is used by the Waterloo (Iowa) Electric Supply Com-

Waterloo Electrical Supply Co.				
Mfg. _____				
No. _____				
Cost _____				
Sell _____				
Glass _____				
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40

By marking through the highest number on this card each time a fixture is sold the record of stock is kept up to date.

pany. As a fixture is sold, a mark is made on the tag through the highest unmarked number.

In addition to the stock record the card gives the manufacturer's name, cost price in code, and the retail price in plain figures.

Making Old Vases Into Electric Portables

The Fornes & Walters Company, of Canton, Ohio, has transformed many beautiful but useless vases into serviceable electric lamps by adding a few feet of cord and a socket. Considerable ingenuity is sometimes required to fit the conductors into the odd-shaped pieces of china and glassware, but the effects obtained are worth the effort. Often with a light inside, the pattern on a vase is brought out very strikingly, especially where there are

strongly contrasting colors in the design.

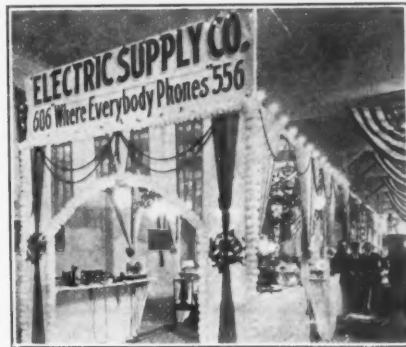
When a contractor is wiring an old house he can often get the housewife to unearth an old vase tucked away in some corner of the attic, which can be converted into an article of real utility, with a little time, wire, and ingenuity.

Glass Jars for Screws, Bolts and Other Small Articles

For his workshop a Long Island contractor has found that metal-topped glass jars furnish convenient receptacles for small parts such as battery terminal screws, small brass nuts and bolts, leatherhead tacks, etc. Instead of throwing all such things into cigar boxes it is not much more trouble to separate them, and in the glass jars they need no labels. Old candy jars, fruit jars and pickle jars are used for this purpose by the contractor referred to, who likes to have even his shop shelves neat, and he says it's well worth the trouble.

Featuring the Phone

If a prospect knows he can reach one contractor conveniently by phone he is going to think a long while before he will walk a mile to consult



This Oklahoma contractor featured his phone number on his signs, rather than his street address.

some other contractor not so conveniently equipped. At the recent electrical show at Tulsa, Okla., the Electric Supply Company featured its phone numbers on the sign over its booth, rather than its street address.

An Electric-Lighted Flood- Lighted Sign

An electric sign, one side of which is lighted by Mazda lamps, while its other side is flood-lighted, has attracted marked attention in Galesburg, Ill. R. A. McLaughlin of the Electric Wiring & Supply Company installed the sign, and he has received requests from several local merchants for estimates on similar jobs.

How to Figure Profits

By I. LEVINSON

President Levinson Electric Company
New York City

In making quotations and pricing goods, most men add a percentage for overhead or "operating cost," and then add another percentage for profit. This requires two calculations, one of which can be eliminated by the



use of the following table. This table was compiled by John Cuthbert and has been used by a number of electrical contractors.

Add to cost of labor and material the percentage at the intersection of the operating and profit columns

Operating Percentages	PROFIT PERCENTAGES							
	5	10	15	20	25	30	35	40
5	10	18	25	33	43	54	67	82
10	18	25	33	43	54	67	82	100
12.5	21	29	38	47	60	71	87	107
15	25	33	43	54	67	82	100	122
17.5	29	38	47	60	71	87	107	135
20	33	43	54	67	82	100	122	150
25	43	54	67	82	100	122	150	185
30	54	67	82	100	122	150	185	233

For example if your operating cost is 17½ per cent of your sales and you want a profit of 20 per cent of your sales add 60 per cent to the cost of labor and material.

Example:—Labor and material \$100 + 60 per cent = \$160.00 selling price
Operating 17½ per cent of \$160 = \$28 \$100 labor and material
Profit 20 per cent of \$160 = \$32 \$60 operating and profit
\$60 \$160 selling price

"HOW IT WORKS" Explained for the Customer



The ABC of Electrical Appliances—Ideas and Stories for Your Local Newspaper



Why Some Lamps Give More Light than Others

"You say that this 60-watt carbon lamp doesn't give the same amount of light as a 60-watt tungsten or a 60-watt nitrogen bulb?" Mrs. Davis was planning to buy more lamps and had stopped in at the local electric company's store to talk it over.

"It does seem queer," agreed the clerk, as he screwed a carbon lamp into the counter socket and snapped on the switch.

"Now this carbon lamp is the poorest of the family—it gives the least light for the energy it receives, and that's only because the filament doesn't get as hot as those in the tungsten and gas-filled lamps.

"When you open your furnace door the whole cellar is lighted up if you have a hot fire. On the other hand, a slow fire gives off very little glow. The hotter those coals are the more light they give out. The word incandescent means 'luminous with intense heat,' so you see it goes right back to temperature.

"Now look at this tungsten lamp. It's brighter because the filament is hotter. But you couldn't burn a carbon filament at that temperature for any length of time because it would sort of evaporate. Tungsten, however, stands a higher temperature.

"Now this gas-filled lamp makes it possible to use a still higher temperature, and we get more light as a result. The nitrogen gas in the bulb keeps the filament from evaporating—much as the air of a humid day keeps your washing from drying rapidly. The gas-filled tungsten lamp has the hottest and brightest filament of all."

"Thank you," said Mrs. Davis, taking her change from her purchase; "the last time I asked about lamps they told me all about watts per candle-power and illuminosity, and I thought it must be too complicated to understand."

"Mothers' Day" at School Spreads Gospel of Electric Cooking

At a reception to the mothers of students attending the Santa Monica (Cal.) High School, much interest was shown in the model electric kitchen which was on display. "Mothers' Day" is an annual event at the school and is an occasion on which the parents are invited to inspect the entire equipment for instruction. The domestic science department with its electric range and convenient appliances was the cause of much admiration and doubtless served to plant the seeds of future sales in many homes.

How Boston Families Save \$90,000 a Year by Cooking with Electricity

Electric cooking is saving the people of Greater Boston \$90,000 a year.

A thousand or so electric ranges are now in service in Greater Boston. Assuming the average family to include six persons, 5700 Bostonians are living on electrically cooked food. With an average daily meat consumption of 0.5 lb. per person, this group would use 2850 lb. per day. The shrinkage of meat with electrical cooking is 25 per cent. less than that which occurs on the old-fashioned range. This nets a total saving of 665 lb. per day for the group, which, at 35 cents per pound, amounts to \$84,943.75 a year.

The average coal consumption per family for cooking is 6 tons per year. For the 950 families this would be 5700 tons, costing, at \$8.50 per ton, \$48,450.

At an estimated cost of \$4 per month per family for electric cooking, the energy consumption for the group for a year would cost \$45,600.

Approximately 400 lb. of ashes re-

sult from each ton of range coal burned. For the 5700 tons of coal this means that 2,280,000 lb. of ashes must annually be carried to the sidewalk for collection. At a charge of 10 cents per can of 100 lb. this amounts to \$2,280 a year.

All these figures, when summed up, show a net annual saving of over \$90,000 by the use of electricity for cooking.

Saving on meat shrinkage per year	\$84,943.75
Saving on coal per year	48,450.00
Saving on handling ashes	2,280.00

Cost of electricity, if used all the year around by 950 families for cooking	\$135,673.75
	45,600.00

Saving over coal by this modern method	\$90,073.75
--	-------------

A Regular Movie Fan

It was in the Rolfe Studio of the Metro Company. Sidney Drew and "wiff" were romping through one of their scenes in the reception hall of their burning home. Smoke poured down the stairs, propelled thither by a zealous operator just out of the picture.

Suddenly chronic enthusiasm attacked the smoke shover, and he turned loose such an excess of fire evidence that Mr. and Mrs. Drew were made very uncomfortable.

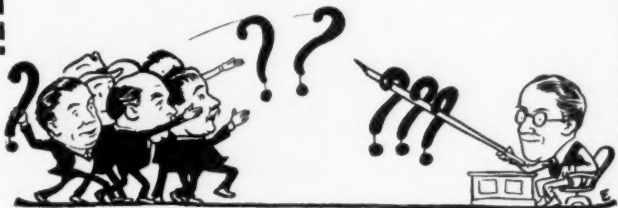
"Blow the smoke away!" yelled Sidney, without pausing in his work. Just outside the picture appeared an electrician with a trusty 14-in. electric fan, and, as the novelist would say of the close of a heated dialogue, the atmosphere was clarified at once.

Flashlight Versus Match

Your small boy cultivates the habit of striking matches because the blaze of light created thereby appeals to some primal impulse of his nature that reasoning with or punishing him will not overcome. Seek another remedy. Replace the toy feature of the match with something of a similar nature, but with the dangerous element eliminated. Try an electric pocket flashlight. Teach him how to use it. Show him that by "pressing the button" he can produce light and create for himself every sensation of joy which he has heretofore experienced in striking the match. Put the flashlight as a new toy in competition with the match. It will win nine times out of ten.—*Fire Facts.*

QUESTIONS AND ANSWERS

*from
Our Readers*



What Should Be Charged to Overhead?

A contractor down South asks: What is the proper percentage to be charged to overhead on ordinary house-wiring jobs in an average size city?—W. H. M.

Turn this question over in your mind and write to ELECTRICAL MERCHANDISING about it. For here is a fellow electrical man who asks for your advice. And your experience is just as interesting as any other man's.

How Much to Spend on Advertising

Here is an issue that could be discussed with benefit in every number of ELECTRICAL MERCHANDISING. The manager of an electric store has asked:

What is the proper method of setting aside a definite appropriation for advertising and how should it be spent?—W. J. J.

Thomas F. Kelly, sales manager for the Dayton (Ohio) Light & Power Company, writes:

"There are many methods of making an advertising appropriation, but I prefer the plan of setting aside a certain percentage of the annual revenue for this purpose. The percentages established range in different companies from 1.5 per cent to 5 per cent. I have heard of small properties spending 5 per cent and of large companies that consider 1.5 per cent sufficient.

"The newspaper is the best medium to use to educate people to the advantages of electric service, the courtesy of employees, and the use of electrical appliances. Your 'copy' in the newspaper should be dignified and forceful; your advertising writer should remember the slogan, 'Truth in Advertising.' When conducting a campaign to secure some particular class of business such as the wiring of old houses, be sure that your newspaper 'copy' states clearly all the facts regarding your proposition. Do not neglect to mention the street address and the telephone number of your company. Use local illustrations whenever possible, and do not overlook testimonial advertising. A well-conducted newspaper campaign would not be complete without an appeal going direct to the prospective customer by bright, forceful letters or illustrated booklets. These should never be cheaply made up. Manufacturers are always glad to supply such material. If you get this material use it. Such

letters or booklets going to a home may be sent under a 1-cent stamp, but when your letter or booklet goes to a place of business always spend 2 cents for postage.

"The backs or ends of your monthly bills are good mediums for advertising electrical appliances and for 'service talks.' If your bills are sent out in envelopes inclose a single booklet once a month. Do not send two booklets; do not overload your customer. If you do, the booklets will go to the waste-paper basket, unread."

Giving Away the Trade Discount

Another question published last month was asked by "R. E. M.":

Should the central station be permitted to give away to customers the trade discount on appliances allowed to them by manufacturers, and sacrifice its profit to make bargain sales, thus cutting under all possible dealer competition?

C. E. Youmans, president of the Youmans Electric Company, Inc., of Yonkers, N. Y., raises his voice in protest against this practice in the following letter:

"A central station has no more right to sell apparatus to a customer at the cost at which it secures it from the manufacturer than it has to furnish a new customer with electricity for a month gratis. The central station is usually very efficient in its estimate of overhead expenses when they are showing the owner of a private plant how much it costs him to operate it, but there are some cases, and the present case in particular, when they are very deficient in estimating their own overhead when it comes to supplying their customers with electrical apparatus. For no matter how efficient an organization a central station man may have, the operating cost of the purchasing, receiving, sales and accounting departments will surely be 15 to 20 per cent in connection with the delivery of the household appliance in question. Therefore the delivery of the appliance to the customer of the central station at the bare price which the manufacturer charged constitutes an act of discrimination against the other customers supplied by the central station.

"If the central station can afford to furnish electrical apparatus to a householder at cost, there is no reason why it should not also furnish the householder's dwelling at cost in order that the occupant of the dwelling might be enabled to use electric lighting from the central station. If it is good business for the central station to furnish people with electrical appliances at cost, it is also good business to go a step further and furnish them at cost with the building in which to use this apparatus. If the central station must have a gross profit of 50 per cent from small consumers on its cost of current, it must likewise charge small purchasers of apparatus from them a similar gross profit of 50 per cent, otherwise discrimination is surely shown against the customer who does not purchase any additional electrical apparatus."

Note—The value of this Questions and Answers Department to you will be just what you make it. Write to us fully about the things you want to know, and when some other fellow asks you for a helping hand, take the trouble to reciprocate.—The Editors.

NEW MERCHANDISE TO SELL AND WHERE TO BUY IT

Appliances, Socket Devices and Wiring Supplies Which
Manufacturers and Jobbers Are Putting on the Market

The Newest Features of 1917 Fan Designs

Improvements in fans this season are noteworthy on account of the fact that the changes made are not radical from the mechanical and electrical standpoint, but will have much to do with the saleability and attractiveness of the popular types of fans. Few new fans

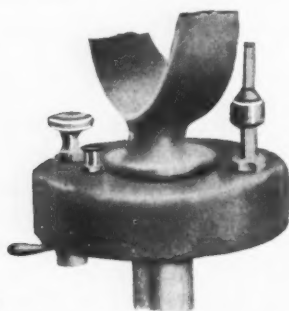


Fig. 1—Oscillating mechanism—Marelli fan

will be placed on the market this year. There seems to be a tendency by some manufacturers to use steel in places where brass was formerly employed, such as for guards. A notable feature is the ease of converting several of the new types from desk to bracket service. One company has developed fan blades and a guard attachment for sewing machine motors, another has designed a blade which it is claimed takes the hum out of fan motors. The majority of makers point out slight changes in designs to improve the appearance of desk and bracket types. Few changes have been made in ceiling fans.

H. Boker & Company, Inc., New York City.—A 10-in. fan with heavily nickel-plated brass blades, guards and fittings

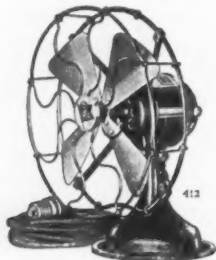


Fig. 2—Robbins & Myers 8-in. fan

is being offered to the trade by this company as distributors for Ercole Marelli & Company of Milan, Italy. This fan has full swivel and trunnion movements, is instantly convertible from desk to bracket type, and has a two-

speed switch with "off" position. This fan, it is claimed, is noiseless on 60-cycle alternating-current and remarkably quiet on direct-current circuits. Attention is also called to the oscillating mechanism shown in Fig. 1. By turning the thumb screw to the right the angle of oscillation is cut down degree by degree to a minimum of 10 deg. total oscillation. When the thumb screw is turned to the left the angle of oscillation is increased in a similar manner to a maximum of 120 deg. total oscillation. Both adjustments can be made while the fan is in operation. The oscillating mechanism may be locked in any position. In Fig. 4 is shown a self-rotating ceiling fan for use in large rooms. While the fan is running a slow rotary movement is obtained, the motor revolving around the vertical axis of the suspension rod.

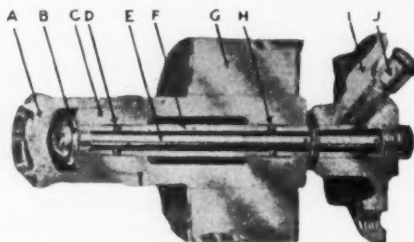


Fig. 3—Cross-section of Emerson fan

Emerson Electric Manufacturing Company of St. Louis, Mo.—Emerson swivel-trunnion (non-oscillating) fans for 1917 are of the same design as sold last year. The 8-in. fans are no longer listed for alternating current or direct current, but the 9-in. fan offered last season is made in both oscillating and non-oscillating styles for alternating and direct-current circuits. Emerson 12 and 16-in. non-oscillating fans are equipped with carrying handles on top of the motors. The oscillating fans for 1917 are all new models with certain minor improvements which have been made without changing the electrical design or decreasing the flexibility and durability of the oscillating device. Details of the oscillating device are shown in Fig. 14. Emerson oscillators of 12 and 16-in. sizes in all types have carrying handles for convenience in lifting the motor. The adjusting collar of the oscillating device, which permits changing the position of the motor on the base to point the fan where the breeze is wanted, makes frequent lifting of the motor unnecessary. The popular six-blade, slow-speed, ultra-quiet residence type in the 12-in. size is

included in the 1917 line, and has been equipped with a new style base and handle. This year the line of oscillating fans for alternating current has been completed by the addition of a 16-in., six-blade, slow-speed oscillator, which is expected to be useful in theaters, assembly rooms, banks, churches and other places where it is necessary to use a quiet fan, but where maximum obtainable breeze is highly desirable. Emerson direct-current oscillators, in 9, 12 and 16-in. sizes, carry the same improvements as the alternating-current fans referred to. In addition to the 9, 12 and 16-in. four-blade direct-current oscillators, a six-blade, slow-speed, 12-in. direct-current style is offered for private offices, hotel bedrooms and such places where an ultra-quiet fan is necessary.

Robbins & Myers Company, Springfield, Ohio.—One new model has been added to the Robbins & Myers line of 1917 fans. This is an 8-in. non-oscillating design, shown in Fig. 2, with a drawn steel frame. With the addition of this fan, the entire line of Robbins & Myers fans are now furnished in the drawn steel construction. The 8-in. fan, known as model 28, is the universal, series type. It is also made to operate on low-voltage storage battery circuits. A switch in the base provides two running speeds. Model 26, alternating current, and model 27, direct current, is a 9-in., five-blade oscillator. Model 26 has



Fig. 4—Marelli fan



Fig. 5—Century 9-in. oscillating convertible fan

a universal series motor and will operate on 100 to 120 volts direct current as well as 100 to 120 volts alternating current, 25 to 60 cycles. It is also made for 220 volts alternating-current service, and model 27 for 220 or 32 volts direct-cur-

rent circuits. Models 21, alternating current, and 22, direct current, are non-oscillating fans which are made in 12-in. and 16-in. sizes for operation on all standard voltages and frequencies. They can be furnished with four or six blades as desired.

Model 24, alternating current, and model 25, direct current, are oscillating

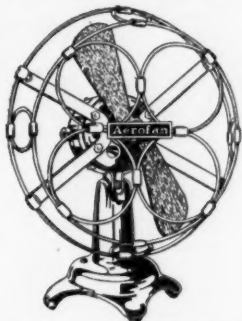


Fig. 6—Russell electric 8-in. fan

fans made in 12 and 16-in. sizes, with four or six blades, for operating on all standard voltages and frequencies. All desk and oscillating fans are supplied with a separable plug and 10 ft. of new code, black reinforced cord. All are adjustable, for desk or wall bracket mounting. The standard finish is black with gold stripes around the body.

The company's line of ceiling fans is the same as offered in 1916. Style "H" is a plain type alternating-current fan, which when furnished in ornamental design is known as style "G." Style "B" is a plain type direct-current fan.

A direct-current ornamental fan, known as style "C," is also supplied. A 12 and 16-in. ventilating fan will be furnished in the same design as in previous years.

Eck Dynamo & Motor Company, Belleville, N. J.—A new development is the —ming blade, shown in Fig. 7, to eliminate the objectionable humming which has existed in fan motors. The illustration does not plainly indicate how this is accomplished since the face view in the picture shows only the shape of the

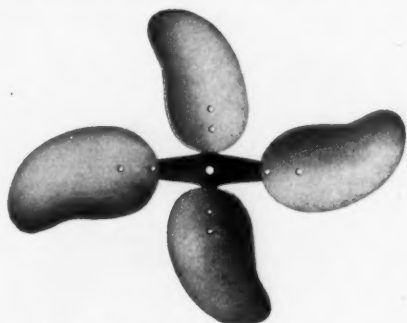


Fig. 7—Blade of Eck fan

blade, and the fact that the four blades are not of exact peripheral diameter, but it does not show that the pairs of blades travel in different planes. It is claimed that it is the combined effect of the shape of the blade, differences in

peripheral diameter and the fact that they travel in different planes, that eliminates the hum so often evident and objectionable in fan motors.

Western Electric Company, New York City.—This company has provided its 6-in. fan with a knuckle joint, allowing it to be used either as a bracket or desk fan, and making it possible to tilt the fan or incline it at various angles. Since this design is primarily a residence fan its attractiveness has been improved by finishing it in frost bronze instead of the conventional black and polished brass.

Several changes have been made in the construction of the Western Electric oscillating fan for 1917, these being, however, small improvements in details of construction. Probably the most significant improvement in the oscillating type is the method of adjusting the arc of oscillation by means of a knurled head screw on the back of the fan in the bottom position. This screw is easily reached and easy to turn, making it possible to adjust the arc of oscillation without stopping the fan. If a foreign object should retard the oscillating move-



Fig. 8—Westinghouse 8-in. fan

ment the fan will continue to operate as an ordinary desk fan. In the construction of both oscillating and desk fans wing thumb screws have been used for making the various adjustments. The guards of the 1917 Western Electric desk and oscillating fans, except for the 6-in. fan, are black Japan instead of brass. It is believed that this is a positive improvement, as brass guards become tarnished and are difficult to clean, whereas the black Japan finish will always look good and is easily cleaned. This year, instead of glued felt on the bottom of the desk and oscillating fan, six hollow rubber washers are used inserted in the base and permanently glued there. Three of these six rubber feet have holes which continue up through the base of the fan for fastening it down when desired.

Hamilton-Beach Manufacturing Company, Racine, Wis.—This company has developed a fan blade and guard attachment to fit its sewing machine motor. As shown in Fig. 11, this device is so constructed that it is easily attached and held by the pressure of two springs. The fan is nickel-plated to harmonize with artistic furnishings.

Russell Electric Company, Chicago, Ill.—The fan shown in Fig. 6 is known as the Aerofan, and supplied in the 8-in. non-oscillating size, with a perfectly formed 8-in. aeroplane propeller. An advance made by this company is the possible speed regulation of its universal motors by bringing out the field taps.

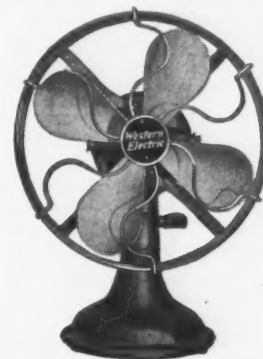


Fig. 9—Western Electric 6-in. fan

This affords good speed regulation on both direct and alternating current, and is most economical of current since it gives full efficiency on all speeds.

Century Electric Company, St. Louis, Mo.—A feature of this company's 1917 9-in. oscillating desk and wall-bracket fan is a construction such that a change of direction of oscillation can be made without adjusting any part of the fan. This is done by simply turning the motor on the swivel stud. The oscillating mechanism consist of a steel worm with bronze gears readily accessible. The body and stand is of drawn steel, with the blades and guard of brass, dipped and lacquered. The 60-cycle fans make seven complete oscillations per minute. Existing designs of stationary, oscillating and ceiling fans have not been changed.

General Electric Company, Schenectady, N. Y.—Most of the 1917 types listed by this company are practically identical with those of last season, only such changes as engineering experience has shown advisable having been made.

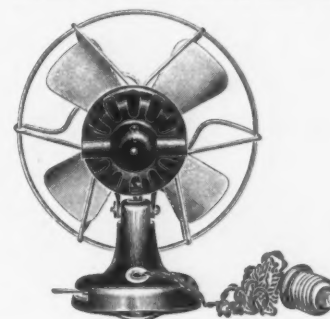


Fig. 10—Gilbert fan

The 9-in. fans were especially designed to meet the demands of those who consider the 8-in. fan too small for effective service. The control switch which is mounted in the base is of the improved lever design with notched guide, insur-

ing a positive setting for each speed. The ease of conversion from desk to bracket type is a feature the maker points out for its 12 and 16-in. designs.

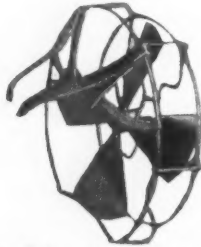


Fig. 11—Hamilton-Beach blades and guard

A. C. Gilbert Company, New Haven, Conn.—This company's new model "C" Polar Cub fan now has two speeds and a stop. The frame is rigidly die-cast, thus eliminating fifty-seven different parts, it is claimed. Its bearings are an integral part of the die castings. The fan is adjustable to any angle so that a breeze can be thrown in any direction. The base has a hook for attaching to wall if desired. The net weight of this fan is 3 lb. 5 oz. A strong spot-welded guard is provided.

Pittsburgh Electrical Specialties Company, Pittsburgh, Pa.—This company makes a line of 8-in., 6-in. and 4-in. fans. The 8-in. fan is a combination desk and bracket type, with a three-speed universal motor, and weighs 5.75 lb. The finish is full nickel or black Japan with brass blades. To supply the demand for a smaller and lighter fan than the 8-in., a 6-in. design is made that weighs only 3.75 lb. This fan has a single-speed universal motor, a round base and is finished in full nickel or black Japan with brass blades. A still smaller fan is made by this company, designed especially for the use of travelers. It has blades 4 in. in diameter, weighs only 2.5 lb. and is finished in full nickel or black Japan with brass blades. The motor is single-speed, of the universal type.

The Carleton Company, Boston, Mass.—This company will continue to offer its moderate-priced universal fans in 6-in. and 8-in. sizes, with slight changes in

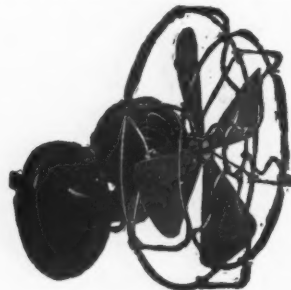


Fig. 12—Carleton 8-in. fan

adjustment and in winding. The motor case is a die casting, and the standard finish is black enamel with guard and blades in nickel on brass, this, it is claimed, being the most permanent

bright finish yet known. The 6-in. fan is furnished in the oscillating desk and bracket type. All sizes and styles will be made for operation on any voltage from 4 to 120.

Peerless Electric Company, Warren, Ohio.—About the only changes made by this company in existing designs is the discontinuance of the 8-in. fan and the substitution of a 9-in. fan. This 9-in. fan will be built in two types: The cast frame commutator type, which will be a universal fan, and will operate on either alternating or direct current; and the drawn steel type, which will be built on the straight induction principle for use on alternating-current service. The commutator type will be furnished for direct-current circuits. Both the drawn steel and cast-iron fans will be built in oscillating and non-oscillating types. All the different sizes of this company's oscillating and non-oscillating fans this year will be equipped with black guards and brass blades.

Manhattan Electrical Supply Company, New York City.—No radical changes in design and construction have been made in the 1917 fans offered by this company. In Fig. 13 is shown a

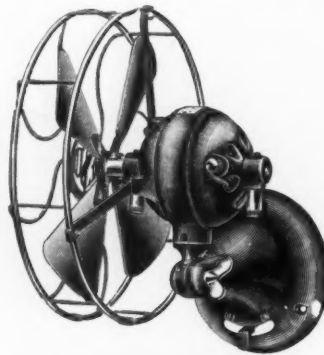


Fig. 13—Manhattan convertible fan

direct-current desk fan in use as a wall fan. This fan is made in two sizes, 12-in. and 16-in. The 8-in. direct-current fan is supplied with a knuckle joint, which permits the body to be moved vertically, but is not adapted for use as a wall fan.

Adams-Bagnall Electric Company, Cleveland, Ohio.—This company calls particular attention to its 1917 alternating-current Gyrofan and oscillating fans. The main changes that have been incorporated in the Jandus and Adams-Bagnall designs cover improvements in detail which give higher operating efficiency and better mechanical service. Fundamentally the fans are not new. They have been in service in sufficient numbers to permit a careful study and analysis of reported troubles which have made it possible to eliminate weak points and strengthen the mechanical features which are so essential in fans of this type in the field. The oscillating fan of the Jandus type which is known to the trade has been improved by details in the course of years, as well as in the substitution of a roller or resilient

pin which increases the number of points of contact and the resulting service. The Gyrofan line is available in column and ceiling types, with and without light attachment.

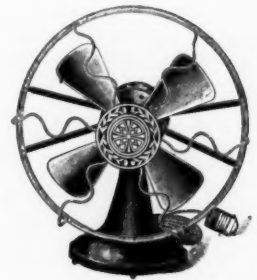


Fig. 14—Lindstrom-Smith 8-in. fan

Lindstrom, Smith Company, Chicago, Ill.—The Breezer electric fan is especially adapted for use in small rooms, telephone booths, near the bedside, on the desk and in inclosed motor boats and automobiles. It is attractive in appearance, noiseless in operation, and is finished in nickel and black. Rubber feet are provided on the base so it will not mar the most highly polished surface. The regular 8-in. type fan is 11 in. high and 9 in. wide over all. When used as a wall fan it extends 9 in. Units are designed for direct or alternating-current energy of any frequency and pressures from 8 to 120 volts.

Model 64, which is a regulation 8-in. fan, has a strong universal motor. The blades and guard are nickel-plated and highly polished, and the base and motor are finished in black. The fans are furnished for any voltage from 12 up to 220 volts, direct or alternating current.

Sprague Electric Works of General Electric Company, New York City.—Sprague fans for 1917 will retain the features which have distinguished them in the past, chief among these being the single-field coil construction which is well known to the trade, having been used in the Sprague-Lundell fan since 1892. A new blade with a curved edge has been designed which is said to increase the efficiency of the fan. This blade also makes it possible to use an improved guard

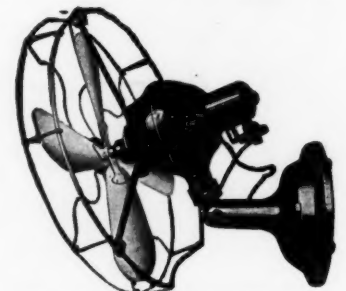


Fig. 15—Sprague convertible wall and desk fan

which is neat in appearance and rigid in construction. The complete fan, including motor body, base, blade and guard, will be finished in black enamel. A 10-ft. cord and attachment plug will

also be supplied with each 9, 12 and 16-in. fan. The fan as shipped from the manufacturer will therefore be ready to operate without additional labor or expense. Ceiling fans are of the four-



Fig. 16—Menominee 8-in. universal oscillator

blade type with a sweep of 56 in. and have three-speed switches. The Sprague "Midget" ceiling fan, which is furnished in either black or white enamel, and has a sweep of 32 in., is a very popular type, being used in large numbers in hotel sleeping rooms. All 12-in. and 16-in. non-oscillating fans may be readily converted to oscillating fans by the addition of the mechanism shown in Fig. 15, which can be attached in a few minutes with the aid of a screwdriver.

Menominee Electric Manufacturing Company, Menominee, Mich.—A new low-priced 8-in. universal oscillator fan is being manufactured this year by the Menominee company. It is built on standard lines with a cast-iron body and base, and is provided with a standard oscillating mechanism and a universal motor. The blades and guard are of black japanned steel. This company will continue the manufacture of its 8-in. straight-type fan in which a few minor changes for improvement have been made. All fans this year, save for the exception of two types, will be equipped with black japanned guards, but the blades and guard holders will be made of brass, as formerly. The manufacture of special patented fans—the table fan and socket fan—will also be continued.

Westinghouse Electric & Manufacturing Company, Pittsburgh, Pa.—During the past year or two a distinct demand has developed for a low-priced electric fan for use in the home. The Westinghouse Electric & Manufacturing Company has included in its regular line of 1917 fans such a type, known as the "Westinghouse-Whirlwind," which is an 8-in. fan weighing about 6 lb. Black steel blades are used as well as a black steel guard instead of brass. The speed control switch is omitted so that the fan has only one speed. It has a hinge joint so that it can be mounted on a wall if desired, and the patented felt base with which all Westinghouse fans are provided. In addition to bringing out a new low-priced, 8-in. non-oscillating

fan, the Westinghouse Company has incorporated a number of new features in its regular line. The complete line comprises oscillating and non-oscillating desk and bracket fans, gyrating ceiling, counter-column and floor-column fans, ceiling fans, and exhaust fans. The bodies of the fans are of drawn metal, or are die cast. The standard finish is dull black. The oscillating desk and bracket fans have three speeds and are made in 10, 12 and 16-in. sizes. The non-oscillating desk and bracket fans are made in 8, 10, 12 and 16-in. sizes, and with the exception of the new low-priced 8-in. fan, have three speeds. All 8 and 10-in. fans have four blades and the 12 and 16-in. fans four or six blades. All desk and bracket fans are made for alternating and direct-current operation, and for frequencies from 25 to 60 cycles and pressures from 100 to 250 volts.

The blades used on the gyrator-type units have drawn-metal frames, and are known as the 12-in. "silent six" fans. One of the fan motors is geared to a mechanical drive operating on a station-

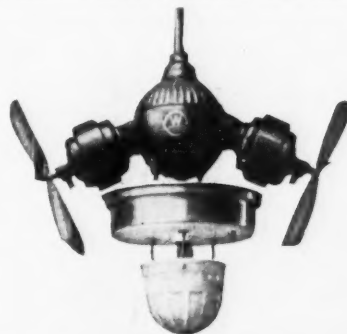


Fig. 17—Westinghouse gyrating ceiling fan with brascolite unit

ary central pulley. The drive is therefore positive and does not vary with the air reaction. The mechanism does not slow down and cannot revolve at excessive speed. Breeze at any angle desired, from horizontal to 35 deg. below horizontal, can be obtained by means of a positive wing-nut adjustment at the side of the gyrating body. These fans operate at one speed, and current is controlled by a pull switch.

The ceiling fans have four blades. For alternating current with frequencies from 25 to 60 cycles and pressures from 100 to 115 volts, they are obtainable with blades having 32-in. or 56-in. sweep. The blades of the direct-current ceiling fans have a sweep of 32 in., 56 in. or 58 in. In the standard fans the air is thrown downward. On special order, however, the blades can be arranged to draw the air upward, a desirable arrangement in places where a downward breeze might disturb papers. Wooden blades with mahogany finish are used for the 58-in. and 56-in. fans. The blades for the 32-in. direct-current fan are also of wood, but have a natural finish. The blades for the 32-in. alternating-current fans are of aluminum, with frosted finish.

A 56-in. ceiling fan can be arranged for two-lamp or four-lamp electrolier

attachments. The 32-in. fans can be arranged for single lamp or two-lamp electrolier attachment. A new loop and link attachment has been incorporated in the 32-in. and 56-in. alternating-current fans whereby two or four lamps respectively may be suspended by loops attached to two or four projecting arms. The lamps are mounted below the fan blades so that no shadows will be cast by the blades. Provisions have been made for equipping the 56-in. ceiling fans with Brascolites and Reflectolites as well.

In Fig. 18 is shown the Crucet Manufacturing Company's 8-in. fan finished in ivory enamel with blue body and hand painting, an 8-in. fan with the same finish on a fan standard and a 12-in. fan finished in ivory enamel with brown stripes and hand painting and standard.

Designs of fans that have already proved satisfactory in service are being offered this season by a number of companies. The Crucet Manufacturing Company of New York City has made no changes in its existing fan designs, but announces that later it will bring out one or two extra types. The Knapp Electric & Novelty Company of New York City, makers of battery fans, has made no changes for the 1917 season. The Fidelity Electric Company of Lancaster, Pa., has developed no new fans. Attention is called to the fact that its type "B" ceiling fans have proved popular with the export trade.

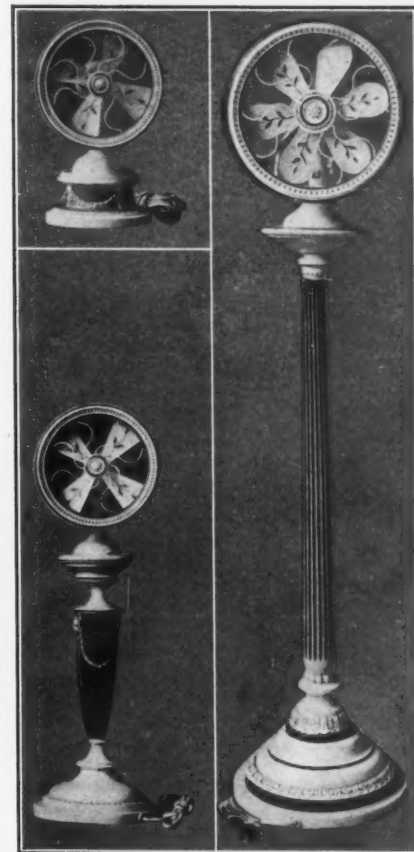
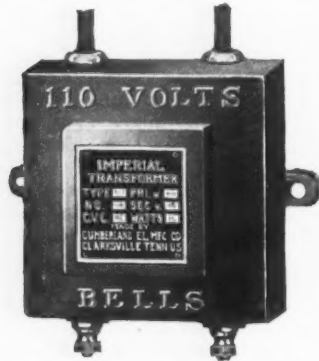


Fig. 18—Three Crucet fan stands in period designs for city or country home

Bell Ringing Transformers for Light Signal Work

Bell ringing transformers which are suitable for light signal work, such as residences and apartment houses, have been developed by the Cumberland Elec-



Bell-ringing transformer for light signal work

tric Manufacturing Company of Clarksville, Tenn. One type of transformer measures 2.25 in. by 3.25 in. by 3.25 in., weighs about 2.5 lb., has a capacity of about 20 watts, and may be used on any current up to 133 cycles. The primary voltage range is from 110 to 130 volts, and the secondary is rated for 8 volts.

Another type that is offered has the same weight and measurements except that it furnishes three secondary voltages, 6-9-15. Its rating is about 25 watts on 60 to 133 cycle circuits. A third type for heavy work is rated at 75 watts furnishing three secondary voltages 6-14-20, for use on 60 to 133 cycle circuits. This transformer is designed for factories and large buildings where there are a large number of bells.

Electric Table Stove with Special Plug

The Standard Stamping Company of Marysville, Ohio, has placed on the market a table stove in which the heating element is made in two sections, one above the other, with 1.5-in. space between them. In the space between the two sections of the heating element a wire toaster drawer is located, so that

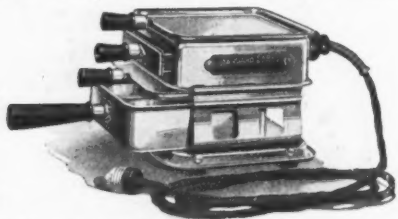


Table stove that permits of three cooking operations at once.

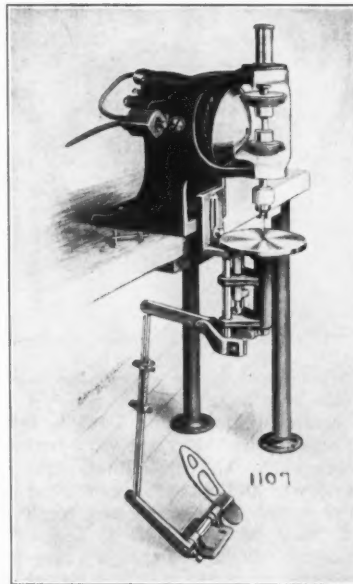
both sides of the bread are exposed to the heat and are toasted at the same time. This arrangement of the heating element also allows two additional cooking operations to be carried on above and below the two outer surfaces of the

heating element, since toasting does not in any way interfere with other cooking operations. An egg-poaching attachment with four egg cups for use in the deep vessel is included in the regular equipment. The deep vessel is also provided with a removable grid for broiling.

Another feature of this table stove, to which attention is called, is the attachment plug with which it is equipped. This plug operates by a tilting motion instead of a straight push-in or pull-out. The manufacturer claims that the use of this plug will eliminate much of the plug and cord trouble experienced with domestic appliances.

Motor-Driven Tapping Machine

A motor-driven tapping machine has recently been developed by The Anderson Die Machine Company of Bridgeport, Conn., in which the power is transmitted from the motor to the spindle through a friction driving disk, and two spindle friction wheels, one for driving the taps forward into the work and the

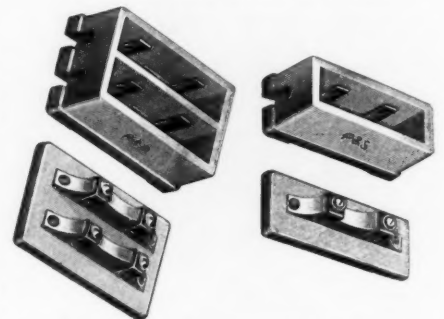


Tapping machine driven by a 1/6-hp. motor

other for reverse. The friction driving disk is mounted direct on the shaft of a Robbins & Myers motor which has a rating of 1/6 hp. at 1750 r.p.m. The motor is pivoted in the frame of the machine on a line with the center of the shaft which carries the friction driving disk. Various cutting and return speeds are obtained by tilting the motor. If the speed is reduced in one direction it will be increased in the other. In this way a quick return speed is obtained to compensate for a slow cutting speed, or if a quick cutting speed is used, the return speed will be slower. The sum of the cutting and return speeds is always 2000. The spindle is mounted in S. K. F. radial ball bearings with a spring provided at the upper end which can be adjusted so as to balance the weight of the spindle and various parts related to it.

Wiring Devices for Foreign Trade

Two fuse blocks made exclusively for foreign trade are shown in the accompanying illustration as manufactured by Pass & Seymour of Solvay, N. Y. These fuse blocks are used to



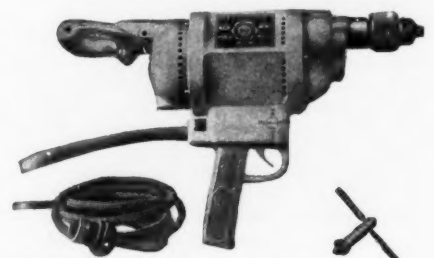
Two fuse blocks for foreign markets

a large extent throughout Europe and South America. The block shown on the right is a single pole fuse block or fuse carrier and the other is a double pole type.

Electric Drill with Special Control

A special control which is designed to prevent the breakage of small drills when operating the close-corner electric drill is shown in the accompanying illustration. The operating scheme is similar to that of an automatic pistol, one finger doing the work. The grip need not be released to turn the switch or push in or pull out the handle at the moment the drill breaks through. The housings are cast from an aluminum alloy having a high tensile strength and resistance to distortion. The chuck is strong and rigid in design. The motor is of special design, and made by the Robbins & Myers Company of Springfield, Ohio.

The commutator and brushes are readily accessible by removing four screws, which enables the top cover to be slipped off. This cover does not carry the armature shaft bearing. This bearing and brushes are carried by an inner spider, which is protected from external injury or strains, tending to bind the bearing. Furthermore, this construction allows the drill to be run while the cover is removed



Drilling machine that protects small drills

for inspection of the brushes and commutator, which is a great practical advantage in the upkeep of the tool. This outfit is a product of the Black & Decker Manufacturing Company of Baltimore, Md.

Electric Tea Kettle

The Hotpoint Electric Company of Ontario, Cal., has recently brought out an electric tea kettle with a submerged-type heating element—that is, the element is on the bottom of the tea kettle



Tea kettle with submerged type heating element

and entirely surrounded by water when the device is being used. This tea kettle is made of drawn copper, spun into shape with a spout of white metal. The grip is made of ebonized wood, comfortably shaped for convenient pouring. The lid has no hinge to come off and locks on securely. The kettle is finished outside in highly-polished nickel to reduce heat radiation to a minimum. The inside of the kettle is coated with block tin. It is provided with fiber feet.

Price Marker for Small Tags or Stickers

A price tag marker that prints in ink from specially made, interchangeable metal type as shown in the accompanying illustration is made by Pannier Brothers Stamp Company of Pittsburgh, Pa. This device can be used with tags, tickets,



Price marker for small tags or stickers made in several models

stickers and labels, and it is claimed that 2000 tags per hour can be handled by it. Several models are made; one that prints three lines of type, each line having a maximum capacity of eight characters; another that accommodates two sizes of

type (8-point and 10-point) and prints four lines and more characters than the first. A third model is larger than the first, printing but one size of type, four lines and eleven characters. A fourth model permits three sizes of type (8-point, 10-point, 12-point). It prints four lines. The first three lines allow for eleven characters of either of the two smaller sizes of type. The fourth line takes eight characters of the large type. A special marker is also made that prints duplicate tags.

Lighting Fixture That Is Easily Cleaned

A lighting fixture designed for the lighting of stores, show windows, public halls, factories and all places requiring a maximum amount of light at a minimum cost is being offered to the trade by the Perfectlite Company of Seattle, Wash. This fixture, it is de-



Suspension fixture in which lamp is concealed from view

clared, by using a nitrogen lamp in connection with its reflector, and a glass bowl which absorbs little light, produces a soft, white light equally distributed. It is also said that a uniform diffusion of light is obtained, making it agreeable to the eyes. The fixture is of simple and neat design, and can be placed in any office or room in a residence and be in harmony with the surroundings. Attention is called to the fact that the lamp is entirely concealed from view, thereby leaving nothing to detract from the lines of the complete units. The fixture is easily cleaned, for by removing one thumb screw, which holds the bowl, easy access is had to the reflector and lamp. One style of suspension fixture is shown in the above illustration.

3-lb. Electric Iron

The Westinghouse Electric & Manufacturing Company of East Pittsburgh, Pa., has developed a 3-lb. electric iron for travelers and for light pressing work, for which several features are claimed.



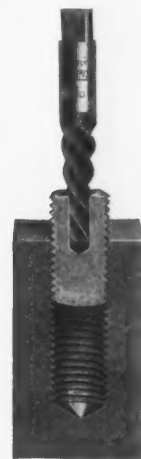
Small iron for travelers

The handle is not removable as in the former model, thus avoiding the danger of losing or misplacing it, with the space required for packing no greater. A hole in the stand provides a receptacle for heating a curling iron.

All of the desirable features of the larger 6-lb. irons are found in the smaller size, including simple construction, guaranteed heating element, and no heat radiation from the upper surface. All heat is given off at the ironing face, which permits an even temperature to be maintained, with no part hotter than another.

Screw Extractor

A tool designed to remove broken screws of all kinds is being offered to the trade by the Cleveland Twist Drill Company of Cleveland, Ohio. The principle of operation is similar to that of the ordinary screw driver, as it bites its way into the broken piece, secures a good hold, and then backs the broken screw out of the hole on its own threads. To operate this device, a hole is first drilled



Showing method of removal of broken screw

in the broken screw, next the tool is inserted and given a slight twist to the left to seat it firmly. A wrench is then applied to insert the tool deeper in the hole, so that when it has a firm hold a reversed twist will bring out the screw.

Insulated Pliers

The Rubber Insulated Metals Corporation, Plainfield, N. J., is now making pliers of tool steel, insulated with rubber compound that it is claimed will withstand high-voltage test and give definite practical service to the user. One of



Pliers insulated for 10,000 volts

the features pointed out for this tool is that it bears the stamp of approval of the Electrical Testing Laboratories, Inc., of New York City, which stamp on each individual plier shows that it has been tested and passed for 10,000 volts. Attention is called to the fact that the bond of the rubber to the metal is of such a character that there can be no chance of its wearing loose. On the contrary, it is said, it is so firmly held to the metal that repeated experiments of a severe nature have failed to show any "break-down," when once the rubber has been applied to the handles.

Conduit Fittings for Push-Button Switches

Two new conduit fittings are shown in the accompanying illustrations particularly adapted to Cutler-Hammer snap switches. In Fig. 1 a surface switch is shown on a rectangular Crouse-Hinds fitting. Fig. 2 shows a switch with special base installed on a standard Paiste taplet. The conduit fittings referred to may be used with any metal conduit of

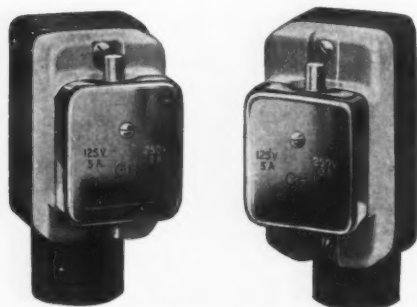


Fig. 1—Left—Surface switch on a rectangular fitting. Fig. 2—Right—Switch with special base installed on a standard taplet.

corresponding diameter and thread. The fittings are small, with a japanned or galvanized finish to match the finish of the conduit. A standard round conduit fitting for a round base switch is also made.

The switches have the characteristic Cutler-Hammer push-button operation with a light button for closing the circuit and a dark button to open the circuit.

In addition to being used on conduit systems it is pointed out that the switches may also be used on practically all kinds of wiring systems—wooden and

metal molding, open wiring and concealed wiring. These switches are rated at 5 amp., 125 volts and 3 amp., 250 volts, National Electrical Code Standard and made by the Cutler-Hammer Manufacturing Company of Milwaukee.

Electric Coffee Mill and Meat Grinder

The combination mill and meat grinder shown in the accompanying illustration is one of several new models that have been placed on the market by the Coles Manufacturing Company of Philadelphia, Pa. The small mill will granulate a pound of coffee in forty seconds, it is claimed, and can be connected to the ordinary electric



Combination electric coffee mill and meat grinders

light socket. It is operated by a 0.25 hp. Westinghouse motor. This mill has obstruction release to clear grinders; an indicating regulator which provides for six grades of coffee; a detachable hand crank for hand operation of the mill should current fail, and a self-cleaner and dust-proof pan. It occupies a counter space of 12 by 17 in., and is 27 in. high.

The combination coffee mill and meat chopper has a capacity of 8 lb. of beef per minute, or will granulate 2 lb. of coffee per minute. It is operated by a 0.75-hp. Westinghouse motor. All parts, including the bowl, are removable. The regular equipment consists of four sets of knives and plates, one sausage stuffing attachment, meat pusher, spanner wrench for chopper ring. Bone grinder, pulley or tool grinder also furnished when desired. It is furnished for mounting on the counter or with pedestal base for floor mounting.

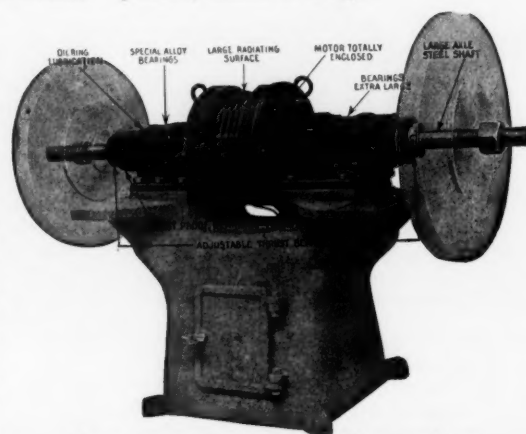
Alternating-Current Grinder Motor

The grinder motor shown in the accompanying illustration has been placed on the market by the Westinghouse Electric and Manufacturing Company of East Pittsburgh, Pa. It is designed for use on two- and three-phase, 60-cycle, alternating-current circuits, and has been constructed especially to meet the severe conditions to which such motors are subjected in grinding and polishing work. This grinder motor is obtainable in three sizes, having capacities of 5 hp., 7.5 hp., and 10 hp. respectively. The 7.5 and 10 hp. two-phase motors are supplied with auto starters. For the 5 hp. two- and three-phase motors an ordinary knife switch is employed, and a special starting switch for the 7.5 two and three-phase motors. The pedestal base, grinding wheels, and tool rests for each machine are furnished by the tool manufacturer.

To protect parts against wear and injury from grit and metallic dust, the bearings are made dustproof, and the motor is wholly inclosed. However, provision has been made for large radiating surface.

The end brackets are solid and cast integral with the feet, which are extra heavy and arranged so that they can be bolted rigidly to the pedestal. The shaft is made of axle steel, is of extra large diameter, and is extended at both ends to receive the grinding wheels. The bearings have large bearing surfaces. The end thrust is taken up by adjustable collars. Two oil rings lubricate the bearings.

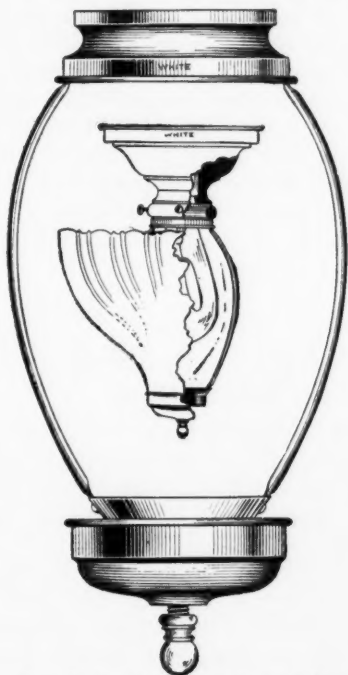
The rotor of the motor, which is of the squirrel-cage form, has no moving contacts. The rotor bars are firmly fastened in the iron core and are short-circuited by end rings. No bolts or screws are used, and there is nothing about the rotor, it is claimed, that can work loose, even under the most severe service, or that will deteriorate under heat. The stator winding is thoroughly treated with an oil and moisture-resisting varnish. In motors larger than 5 hp. the winding consists of coils wound on forms and completely insulated, then laid in the open stator slots and securely held in place by means of wedges.



Motor for grinding and polishing machines

Semi-Indirect Holder

A semi-indirect holder which can be used where fixtures are already in place without removing the socket in order to install the holder is now being made by the J. H. White Manufacturing Com-



Method of using semi-indirect holder

pany, 111 North Third Street, Brooklyn, N. Y. This device is designed for standard 2.25-in. glass shades and allows the shades to be used either in an upright or inverted position on pendants, portables or ceiling lights. In the illustration, the inner view shows the holder in use with an ordinary ceiling light, the outer view being that of the holder.

Wax Figures for Window Display

The Frankel Display Fixture Company, 733 Broadway, New York City, is marketing lock-jointed wax figures for window display purposes. The figures are made up on skeleton frames of steel and wood, and it is claimed that great flexibility is attained through the specially designed joints. The feet are made of iron lasts and with lock-jointed ankles the figures will stand without support. The manufacturer offers to send a catalog to any address upon request.

Commutator Cleaner

The Dyno Utilities Manufacturing Company, 608 South Dearborn Street, Chicago, is marketing a new commutator cleaner. It is put up in paste form in tin boxes of 1-ounce size, which are packed in cartons containing six boxes. It is claimed for this cleaner that it will remove all the dirt from a commutator and clear itself from the surface at the same time, leaving nothing on the face of the commutator to increase the contact drop

at the brushes. This product is claimed to remove oil and grease as well as dirt, and will, it is said, eliminate the use of sandpaper on commutators entirely. The manufacturer makes the particular claim that this product is not a lubricant and is not a commutator compound, and contends that modern machines with proper brushes do not require the use of lubricants if properly cleaned. The product is sold under the trade name of "Seven-in-One Commutator Cleaner and Resurfacer." It is the plan of the manufacturer to market this cleaner through established jobbers in the electrical trade.

Motor-Driven Saw Table

A handy, portable motor-driven saw table that is rugged in construction is being marketed by James G. Biddle, 1211-1213 Arch Street, Philadelphia, Pa. With the proper saws, this device will cut hardwood up to 1 in. or 1.5 in. thick, soft wood from 1.5 to 2 in., and brass or



Portable saw table (motor driven)

fiber up to 0.5 in. thick. By rotating when sawing, brass or fiber tubing with walls up to 0.25 in. thickness, it is claimed, can be easily handled, as well as rods of the same materials up to 1.5 in. in diameter.

The framework of the table is one casting, providing a rigid support which is planed smooth and true, with all parts carefully fitted. For grooving or slotting, the table top may be raised or lowered by means of an adjusting screw.

As shown in the illustration, the motor and switch are protected by mounting on the under side of the dust chute. This chute is hinged at one end, the other end resting on an adjusting screw. By this arrangement the tension of the belt is easily regulated. The table is 12 in. by 16 in. and 12 in. high. The maximum diameter of the

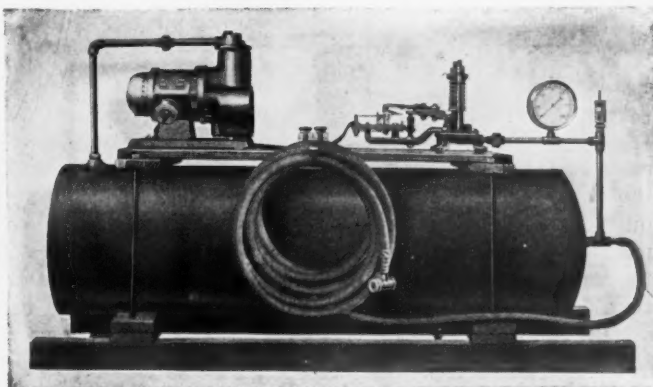
saw is 6 in.; and the weight of the outfit 65 lb. The motor is of special design, 110 or 220 volt, alternating or direct current.

Bell Ringing Transformer for Residences

The Sieffert Electric Company of Evansville, Ind., has developed a bell-ringing transformer for use in residences on 110-volt, 60-cycle circuits. The secondary voltage is from 6 to 10 volts. It is claimed that this transformer is so efficient that its losses will not register on the average watt-hour meter. The case is of cast iron, properly insulated, and it is arranged so that it can be mounted without any difficulty.

Tire Inflator Outfit for Free Air Service

The Black & Decker Manufacturing Company, 105-115 South Calvert Street, Baltimore, Md., has developed the automatically operated tire inflator tank outfit for automobile air service shown in the accompanying illustration. This outfit starts working immediately on turning the switch and will keep on until the pressure in the tank reaches 150 lb., then the automatic pressure switch shown on the right comes into action and stops the machine. To inflate a tire, the Remort air chuck on the end of the hose is pressed over the tire valve and the pressure in the tire will rise instantly, it is claimed, to any number of pounds desired. When enough air has been used to cause the pressure in the tank to drop to 120 lb., the automatic switch starts the device again and brings the pressure back to 150 lb. Attention is called to the fact that the device has no exposed mechanism, electrical or mechanical, so that it is impossible for anyone to be injured through coming in contact with moving armatures, gears, rods or shafts. A cover is furnished for the automatic switch which completely incloses all mechanical and electrical parts. These machines can be used on 110 volts direct or alternating current of from 25 to 60 cycles.



Electrically operated tire inflator tank outfit for free air service



GOSSIP OF THE TRADE



Mr. Edison's Old "Boys" Help Celebrate His Seventieth Birthday

Thomas A. Edison was seventy years old on Feb. 11. To celebrate the Wizard's arrival at three-score-and-ten, 1500 of his old associates and present employees gave a birthday dinner in his honor in the battery plant at Orange, Feb. 10. Seventy of Mr. Edison's old-time asso-

Pacific Coast Jobbers Hold Annual Convention

The annual meeting of the Pacific Coast Division of the Electrical Supply Jobbers' Association was held at Del Monte, Cal., Jan. 11, 12 and 13. Under the recent regrouping plan this division now includes Salt Lake City, Butte and Spokane.

At the open meeting with the manufacturers, S. V. Walton, of the Pa-

suggested that the newly formed Pacific Coast Section of the N. E. L. A. offers a channel through which it would be possible to extend to the contractor and dealer the help which this class of the industry urgently needs.

The election of officers resulted as follows: Chairman, Samuel H. Taylor, Electric Railway and Manufacturers' Supply Company, San Francisco; secretary, Albert H. Elliott, San Francisco; and T. E. Bibbins, Pacific States Electric Company, San Francisco, was named as member of the general executive committee from the Pacific Coast Division.

N. E. L. A. at Atlantic City May 29-June 1

The National Electric Light Association will hold its next annual convention during the four days May 29, 30, 31 and June 1 at Atlantic City, N. J.

The reception, meetings and exhibition will be held at the Million-Dollar Pier, at which place headquarters of the association will be established. In order to overcome one of the objectionable features of past meetings at Atlantic City, namely, that of the noise of the waves, all meetings will be held on the second floor of the pier instead of the first.

An Electric-Vehicle Vest- Pocket Notebook

The Ward Motor Vehicle Company of Mount Vernon, N. Y., offers to send free, on request, a handy little pocket notebook containing useful reference information, together with statements pointing out the merits of the electric automobile for delivery purposes. "Electricity is the inevitable power; the electric is the ultimate car," is the message on the flyleaf, which continues:

"The first price is within the reach of every merchant and storekeeper. It will average 25 miles per day at a cost for electricity of less than \$11 per month. Mile for mile it costs less to keep it in tires than it does to keep a horse in shoes. Electric delivery wagons are the most modern, efficient and reliable of all delivery vehicles."

As above noted, a copy of this booklet will be sent to any address upon request.



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THOMAS A. EDISON, INDEFATIGABLE WORKER, AT SEVENTY

"Mr. Edison's vocation is chemistry, his avocation is electricity as a sideline," declares the friend who knows him intimately.

And his vacation, we might add, is taken out chiefly in hard work in the great Orange, N. J., laboratory, a corner of which is here pictured.

ciates, including Samuel Insull, C. L. Edgar, John W. Lieb, T. C. Martin, W. J. Hammer and others were invited to act as an escort of honor for the guest. There were no speeches, but the banqueters were entertained with music and motion-pictures given by machines of Mr. Edison's invention. Mr. Edison was also the recipient of hundreds of congratulatory telegrams upon his anniversary, from prominent Americans, leaders of the central station industry and others.

cific Gas & Electric Company, San Francisco, read a paper on "Closer Co-operation Between Central Station and Dealers" leading up to a suggestion that definite steps be taken toward a closer co-operation of jobbers and manufacturers, central stations, and dealers. It was suggested that manufacturers might extend to the small dealer and contractor more aid in the detail of display, demonstration and sales work.

T. E. Bibbins of San Francisco,

Contest for Dealers' Best Fan Sales Campaigns

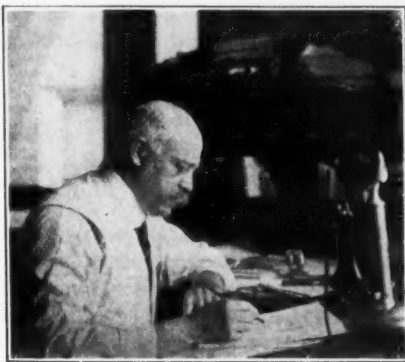
In its trade folder on 1917 fans, the Western Electric Company, 195 Broadway, New York City, announces a prize contest for the best 1917 fan sales campaigns. The awards will be based upon the following factors: Window display; house-to-house canvassing methods; personal sales arguments; use of printed advertising matter; local newspaper advertising; lantern slides in local motion picture theaters; increase in 1917 fan business over 1916, and the general campaign as a whole. For the best fan sales campaign in the opinion of the judges, \$100 is offered. A second prize of \$50 is listed, together with five \$10 prizes, and the company offers to pay \$1 each for photographs of window displays.

Generally speaking, no great effort is made by dealers to sell fans to the consumer. The usual method is to put a few fans around the store or show room, or in the window. Then, when a really hot day comes the fans sell themselves.

With more effort on the part of the dealers, a proper appreciation of merchandising principles and the judicious use of advertising sales helps, the number of fans sold each

season, it has been declared, could be tripled.

The time to begin selling fans, it is pointed out, is the first warm day in May. Reminding people of the comforts of an electric fan early in the season will result in their buy-



Secretary T. C. Martin, "hard at it" with characteristic vigor, planning arrangements for the N. E. L. A. convention at Atlantic City in May. Mr. Martin is, by the way, Mr. Edison's long-time associate and biographer.

ing fans in May and June instead of continually putting it off and then finally going through the summer without buying a fan at all.

Already the manufacturers and jobbers are ready with plans to help the dealer reach prospects and stir up an early interest in fans.

\$1,250 in "Wire-Your-Home-Time" Prizes

The Society for Electrical Development has announced cash prizes totaling \$1,250 in connection with its annual spring house-wiring drive, set this year for the six-week period from April 1 to May 15.

The country will be divided for campaign purposes according to population so that cities and towns of nearly equal size will have equitable chance of competition.

The highest prize for each of the five groups of cities, going to the solicitor who can show the largest number of contracts secured between April 1 and May 15, will amount to \$150. There will be a second prize of \$50 for each group; also five additional prizes of \$10 each.

The \$1,250 prize campaign will be one of the main features of "Wire-Your-Home-Time," the details of which were worked out by the society's special house-wiring committee which, as pictured on this page, met on Jan. 18 at the Society's offices in New York.

The Society will issue a "How To" handbook giving suggestions for putting on local campaigns, suggested sales display and advertising helps of special value.



THE SOCIETY FOR ELECTRICAL DEVELOPMENT'S COMMITTEE ON "WIRE-YOUR-HOME-TIME" IN SESSION AT NEW YORK

Those in the photograph, reading from left to right, are: Robert Montgomery, Louisville (Ky.) Gas & Electric Company; P. B. Zimmerman, National Lamp Works, Cleveland, Ohio; J. M. Wakeman, General Manager, Society for Electrical Development, New York; G. M. Sanborn, Sanborn Electric Company, Indianapolis, Ind., chairman; Elliot Reid, Westinghouse Lamp Company, New York City; T. J. McManis, Edison Lamp Works, Harrison, N. J.; M. A. Oberlander, Western Electric Company, New York City; J. T. Kelly, Society's Staff; M. S. Seelman, Jr., Edison Electric Illuminating Company of Brooklyn; A. J. Edgell, Society's Staff; H. C. Heidrich, Electric Motor & Repair Company, Newark, N. J.; H. W. Alexander and E. M. Hunt of the Society's Staff.



President S. W. Cooper of the United Electric Company, Wichita, Kan., gazing in rapture at a golf ball that has left him suddenly and for parts unknown.

The Commonwealth Edison Company of Chicago, Ill., has adopted a red triangle as a symbol of electric heat. In mediaeval days this sign stood for the vainly sought "permanent heat," and the company points out that the symbol approaches its true meaning when applied to industrial electrical heating.

Harry Pickhardt, for eight years assistant sales manager of the Phoenix Glass Company in New York, and previously salesman with the Holophane Company, has purchased the business of L. D. Hatton, 98 Park Place, and will continue it as manufacturers' sales agent, specializing in lighting equipment. Mr. Pickhardt begins his new venture as Eastern sales agent for the John Dunlap Company line of porcelain-enameled steel reflectors.



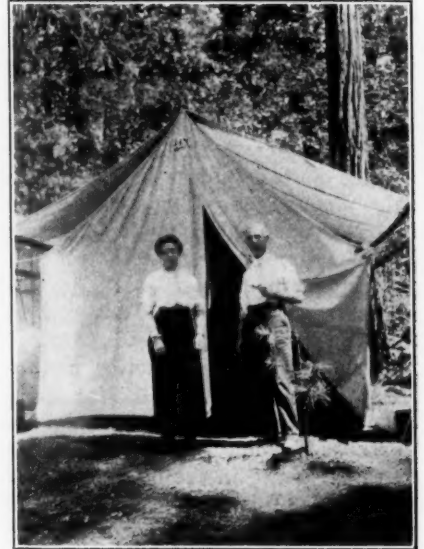
Trooper Montgomery was one of the many heroes photographically shot during border service. In peaceful life he district-manages the National Metal Molding Company at Buffalo, N. Y.

F. R. Farmer, who has been vice-president and manager of the Beardslee Chandelier Manufacturing Company of Chicago, has resigned that position to take charge of the accessories division of the Gibson Company, an Indianapolis (Ind.) automobile supply house. Mr. Farmer will, however, remain a director of the Beardslee Chandelier Manufacturing Company.

J. W. Ostertag has been promoted to the position of assistant commercial manager of the Harrisburg (Pa.) Light & Power Company.

H. M. Byllesby of H. M. Byllesby & Company, Chicago, addressed the Electric Club of that city concerning the responsibility of the electrical man to his country. Referring to our lack of preparedness, Mr. Byllesby said, "I want to emphasize that the electrical man, if these ominous portents materialize, must expect to use in the defense of his country all, and more than all, of the remarkable resource and adaptability which he has shown in the development of the business. I want to impress it upon every electrical man that he should begin at the present moment to prepare himself for the emergency."

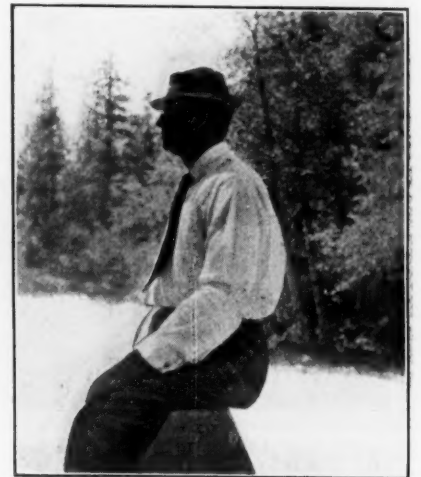
Raymond H. Smith, who was recently promoted from the position of general manager of the Jackson (Miss.) Light & Traction Company to be vice-president and general manager of the Sheboygan (Wis.) Electric Company, was presented just before he left Jackson with a silver loving cup by the citizens of that city "in grateful recognition of his public service." Many citizens of Jackson at first signed a telegram of protest against Mr. Smith's removal to Sheboygan, but finally decided that it would not be fair to attempt to deprive him of an excellent opportunity for promotion and did not send the message. Mr. Smith was active in the local Board of Trade at Jackson and at the time of his departure from that city was president of the local Rotary Club. Each member of the Jackson Rotary Club wrote a letter to a member of the Sheboygan Rotary Club in the same business, commending Mr. Smith in the very highest terms. In consequence, at the first meeting of the Sheboygan Club after his arrival Mr. Smith was unanimously elected to full membership without formality of examination.



"Colonel" and Mrs. Carter, simple-living it among the big, tall timbers, as photographed by our special Yosemite correspondent.

Harry C. Brown is now manager of the electrical supply department of the Edward Joy Company of Syracuse, N. Y. Mr. Brown was formerly assistant secretary of the National Electrical Contractors' Association, Utica, N. Y.

J. Bruce Stuart, who for the last three years has been division power representative with the Public Service Electric Company in its Hudson division, has been transferred to the general office as assistant to the general power representative. W. R. McLeod, for the past year power representative in the Jersey City office, succeeds Mr. Stuart as division power representative.

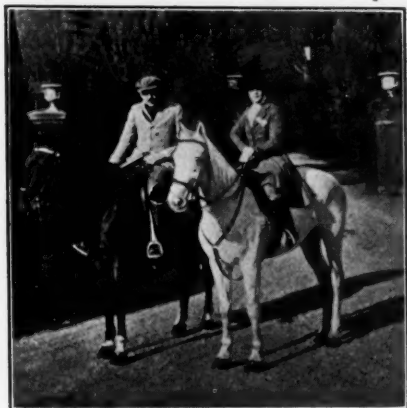


Pacific Coast sales managers don't have to work. Take W. B. Hall of Pass & Seymour for instance. The picture shows him taking things easy among the California foothills last fall.

P. H. Bailey has resigned as commercial manager of the Harrisburg (Pa.) Light & Power Company to become sales manager for the Moorhead Knitting Company of Harrisburg, Pa.

Sam Heffner has been appointed manager of the Meredith (N. H.) Electric Light Company.

A "Promising Department" has been established by one large electrical manufacturing company, and, according to its salesmen, has become a wonderfully useful adjunct to its merchandising force. Advices from the firm's customers are to the effect that the new department is more obliging than any other branch of the business.



Two's company on a bridal path, and you can't blame the W. B. Satterlees for looking askance at the "crowd"-producing camera toter. Mrs. Satterlee's husband is president of the Satterlee Electric Company of Kansas City, Mo., and one of the incidents of their recent honeymoon was the Westinghouse Agent Jobbers' Convention

W. C. Stevens has been appointed sales manager of the Cutler-Hammer Company of Milwaukee. Since October, 1913, Mr. Stevens has been New York manager for the company.

G. F. Morrison has been elected vice-president of the General Electric Company. Mr. Morrison started his career unwrapping lamp bulbs for Thomas A. Edison and climbed to the position of general manager of the Edison Lamp Works of the General Electric Company.

Louis Kalischer, 1225 Myrtle Ave., Brooklyn, N. Y., has secured the contract, amounting to \$32,529, for the complete electrical equipment consisting of transformers, motors and wiring, for the model pasteurization and ice plant for the Sheffield Farms, Slawson-Decker Company, Fulton Street, Brooklyn, N. Y.

Jack Cross, who has been district heating specialist for the General Electric Company at Chicago, has been appointed manager of heating-device sales with headquarters at Pittsfield, Mass. Mr. Cross succeeds J. F. Killeen.

The Remy Electric Company has broken ground for a new factory building at Anderson, Ind. The making of small parts will be carried on in the new plant and women will be employed exclusively in the work. The interior is to be finished in white and several rest rooms are planned.

The St. Elmo Electric Company of Chattanooga, Tenn., is newly located at 239 East Main Street and is fitted up to handle all types of electrical contracting. W. A. Jewell is proprietor and general manager of the company.

T. K. Quinn, the live-wire credit manager of a Cleveland jobbing house, in a talk which he made before the Electrical Credit Association of Chicago, preached the doctrine that credit and sales departments should be more intimately acquainted. Mr. Quinn emphasized his point by saying that on a recent trip to New York he walked up and introduced himself to one of the company's salesmen. The man looked him over, then invited him to sit down. In a tone of much surprise he said: "Quinn, when you told me you were a credit manager, I almost dropped dead. I always supposed that a man to be a credit manager must be a fossilized old geezer with whiskers as long as



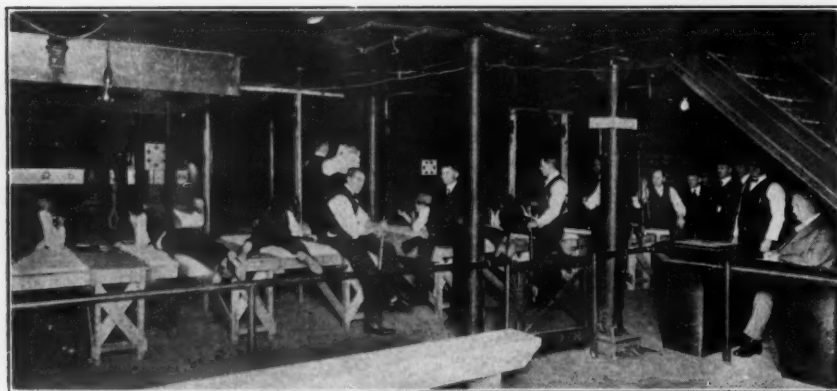
Samuel H. Taylor, president of the Electric Railway & Manufacturer's Supply Company of San Francisco, and C. B. Hall, secretary and treasurer of the Illinois Electric Company, Los Angeles, are here seen busily making shadows on the cement pavement at Hot Springs, Va.

African grass." This impression, said Mr. Quinn, is the one commonly possessed by practically all salesmen. In spite of it, however, credit men are human, and the salesmen, as well as the company, would profit if the impression was eradicated.

F. Mahen won first prize recently in a contest held by the New Orleans Railway & Light Company for "business getting leads." Mahen turned in 170 such pointers. R. L. Hottinger's 122 leads brought him a second prize, while Bill Tallant secured third money with 58 suggestions.



The gallantry of Sir Walter Raleigh is with us yet, even in this day of electric vehicles. Cavalier Arthur Williams of the New York Edison Company with courtly grace hands Miss Dolores Duncan, golf championette, from her electric brougham.



The Commonwealth Edison Company of Chicago is noted for its good sports. Prominent among these is indoor rifle-shooting, which has been popular this winter in the electric-lighted range fixed up in the basement of famous old "120 West Adams Street," the former headquarters of the company.

Louis H. Egan has been appointed general manager of the Electric Company of Missouri and the St. Louis County Gas Company at Webster Groves, St. Louis County, Mo., succeeding Charles S. Ruffner, who has become vice-president of the Union Electric Light & Power Company.



There's always something to be thankful for. For instance, L. C. Stecker of the Northwestern Electric Equipment Company has just discovered that the family snow shovel is busted.

S. D. Black, president of the Black & Decker Manufacturing Company, states that due to the increased demand for electric tire inflators and electric drills the company has found it necessary to plan for a new plant, land for which has already been purchased.

Commercial Attaché Philip B. Kennedy has written a discussion on "Exporting to Australia" which deals with the practices and regulations to be observed by American shippers engaging in Australian trade. Copies of the publication are obtainable from the Bureau of Foreign and Domestic Commerce at Washington.

E. H. Stover, a Pittsburgh, Pa., electrical supply dealer, has recently removed his office from 518 Empire Building to 705 May Street.

Carlos Bowen, a lieutenant in the Chilean Navy, is in America to obtain information on electric-light installations for isolated farms, with a view toward the use of farm lighting in Chile.

A. L. Smith, Jr., presented a paper on the progress of electric range applications in New England central stations at the recent convention of the New England section of the N. E. L. A.

Paul A. Nehring is president and general manager of the newly incorporated Nehring Electric Company of Chicago. The company makes weatherproof wire and cable and will manufacture special machinery for insulated wire plants.

H. C. Brown has been appointed manager of the Edwin Joy Electric Company at Syracuse, N. Y. For several years Mr. Brown has represented the Crouse-Hinds Company in Canada, and since last February he has been assistant secretary of the National Electrical Contractors' Association.



Funny how a nickel will roll around in circles when you drop it. W. G. Balph, who sells fans for the Westinghouse Electric & Manufacturing Company, is here pictured just before he put his foot on it.

W. E. Jones, who is district sales manager for the Economy Fuse & Manufacturing Company in the Pacific Northwest, has opened a branch sales office for the company in Seattle, Wash.

C. P. MacGonigal is now branch manager of the Wagner Electric Company, with headquarters at Buffalo and Syracuse, N. Y.

The Western Electric Company has issued a fourteen-page folder illustrating various applications of its flood-lights. Eleven reproductions from photographs are shown, and the scenes pictured range from Niagara Falls to the Denver post office. Perhaps the handsomest view from an artistic standpoint is one showing the flood-lighted cataracts above the American Falls at Niagara.



Here is G. A. Lowther of the new-business department of the Sandusky Gas & Electric Company, addressing a luncheon at which he recently entertained several of his valued employees. Encouraged by the use of electric light in their apartments, the fifty-four hens gratefully produced 80 doz. eggs during last month.

H. M. West has been appointed commercial manager of the Harrisburg (Pa.) Light & Power Company.

THINKING

If you think you are beaten, you are,
If you think you dare not, you don't.
If you'd like to win, but you think you can't
It's almost a cinch you won't.
If you think you'll lose, you're lost,
For out in the world we find
Success begins with a fellow's will,
It's all in the state of mind.

If you think you're outclassed, you are;
You've got to think high to rise,
You've got to be sure of yourself before
You ever can win a prize.
Life's battles don't always go
To the stronger or faster man;
But soon or late the man who wins
Is the one who thinks he can.

Walter D. Wintle.

From Service Talks.
Gas & Electric Improvement Company.

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